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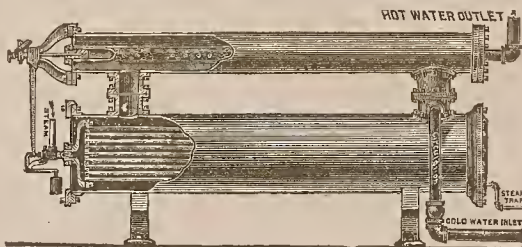


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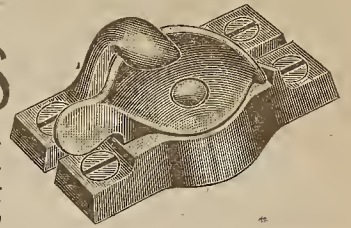
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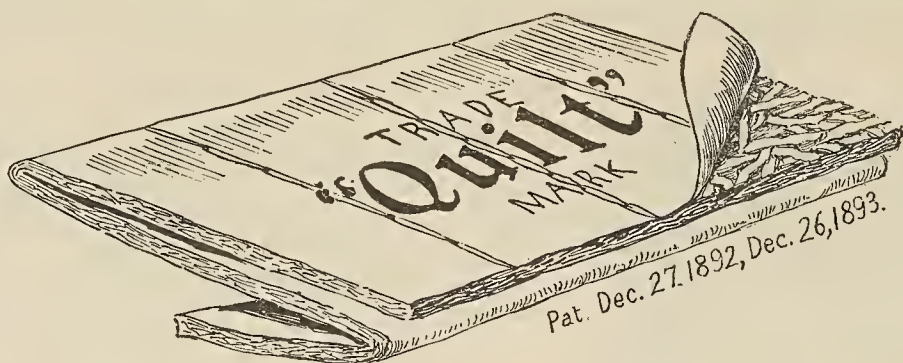
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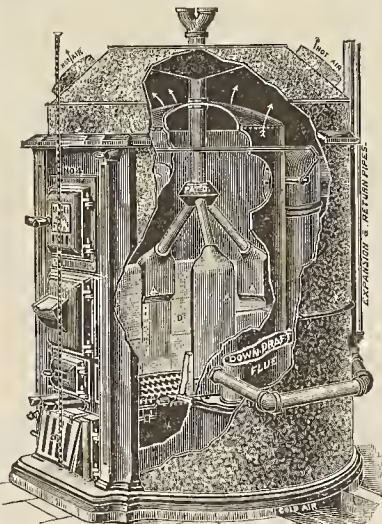
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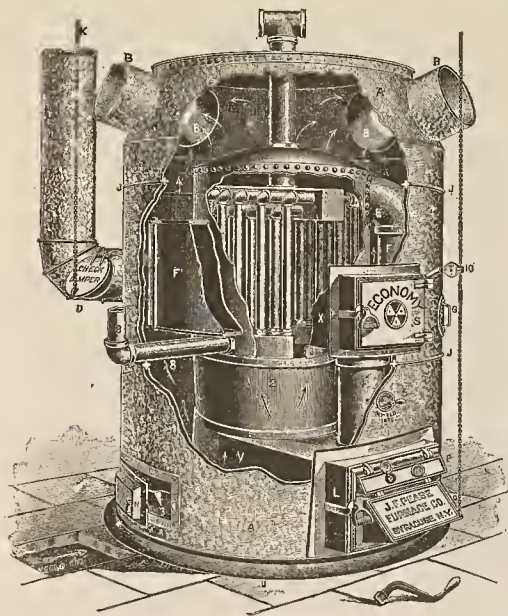
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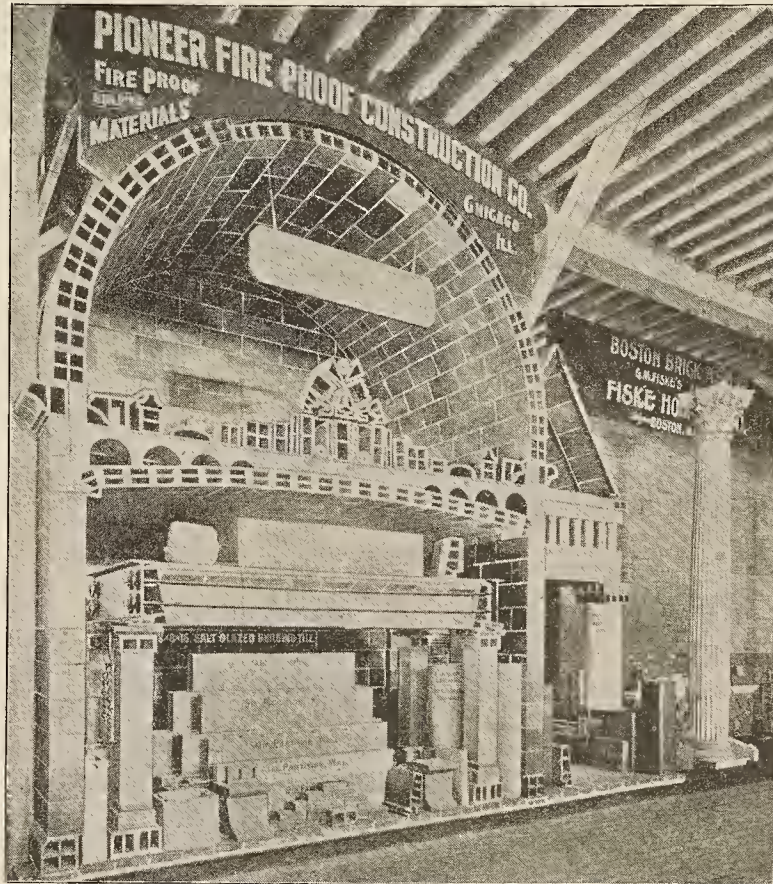
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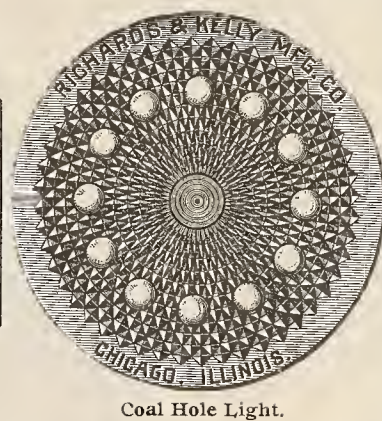
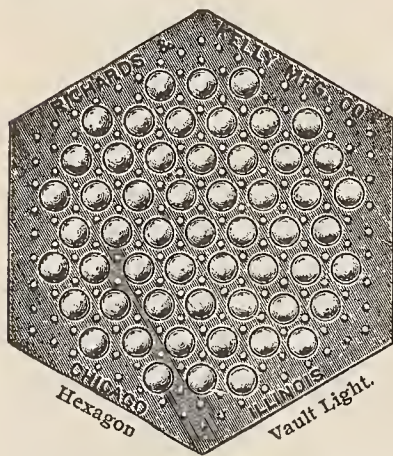
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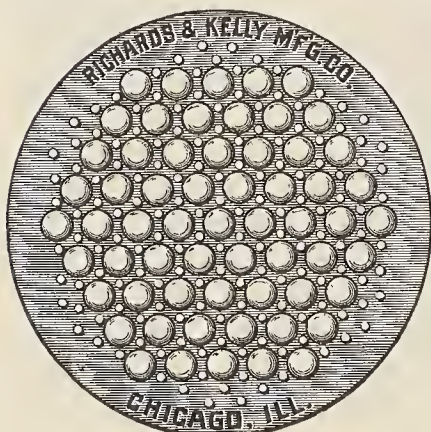


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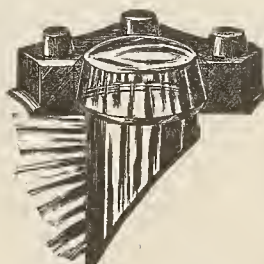
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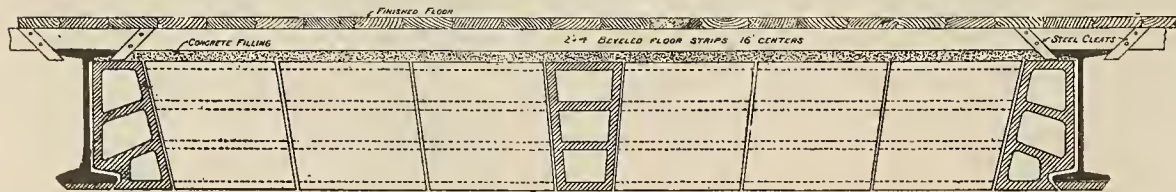
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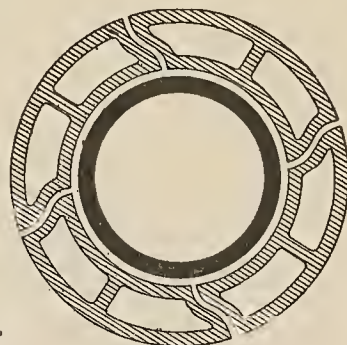
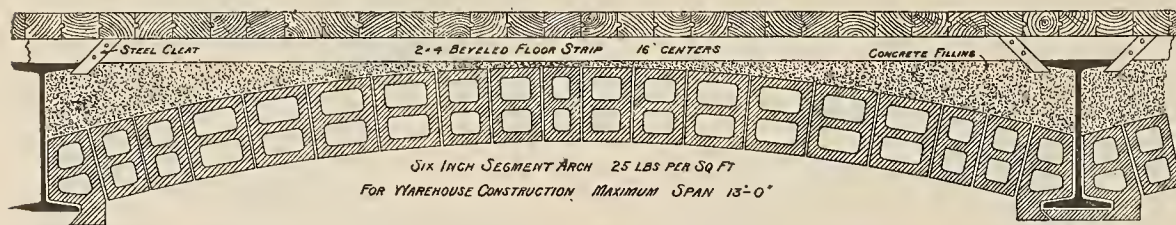
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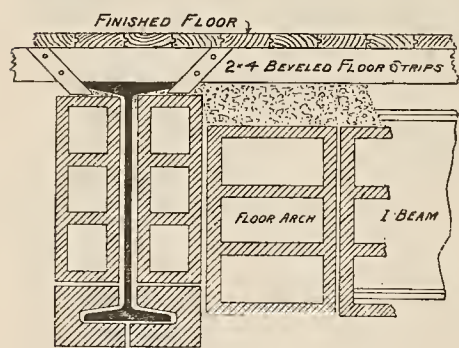
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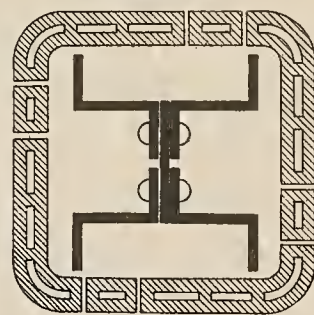
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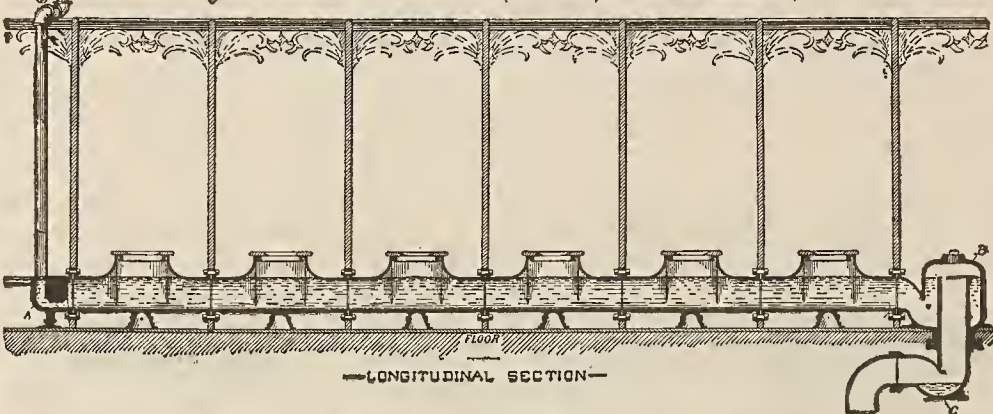
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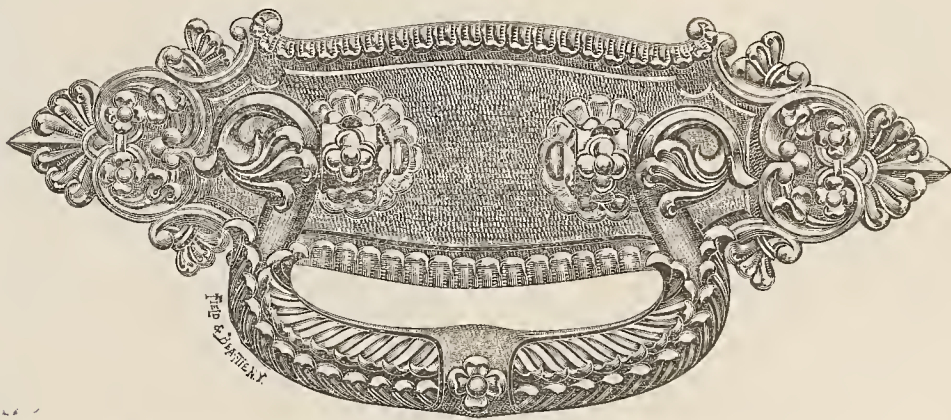
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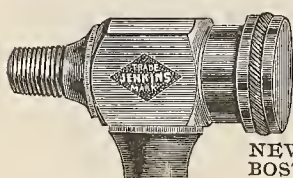
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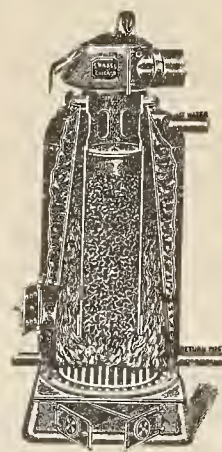


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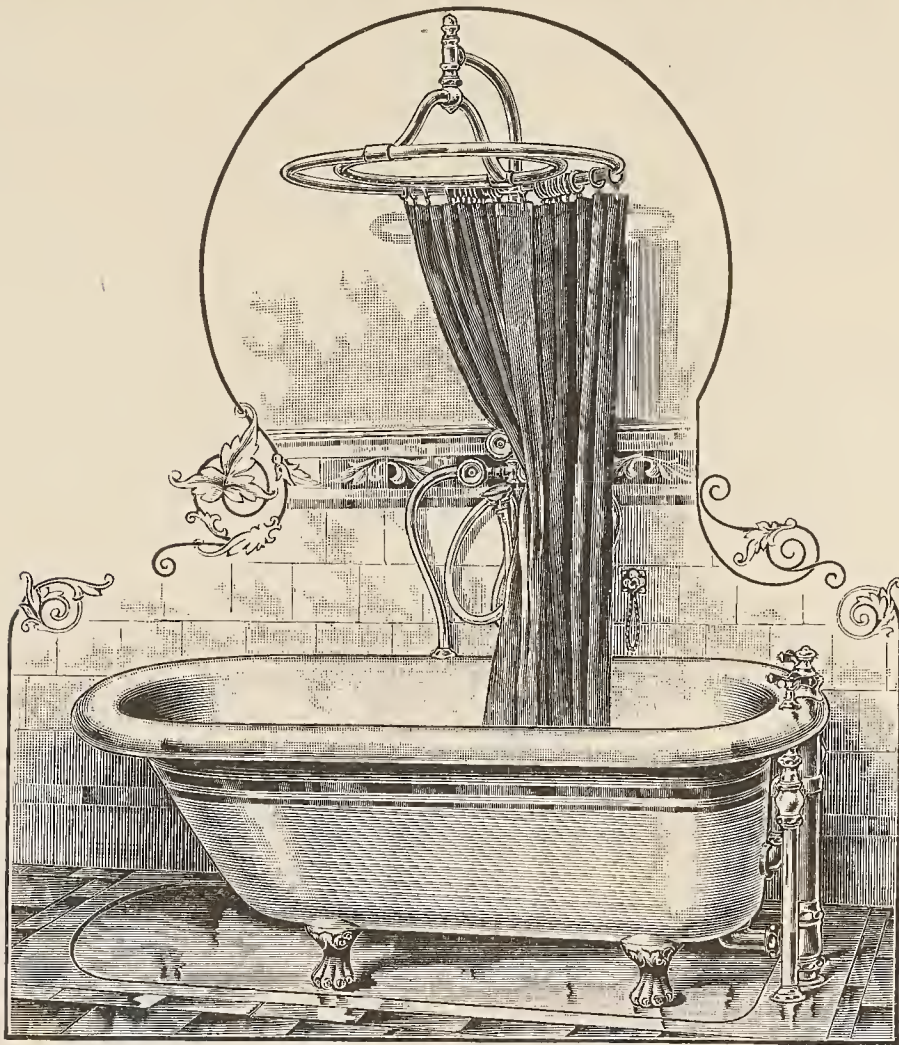
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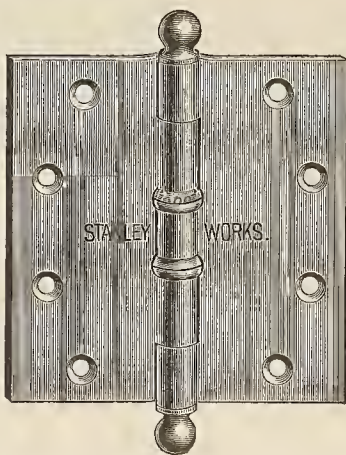
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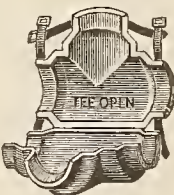
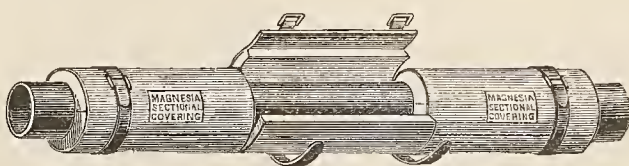
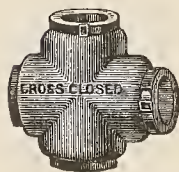
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**CONSTRUCTION, DECORATION AND FURNISHING**  
**IN THE WEST.**

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**Thirtieth Annual Convention A. I. A.** The thirtieth annual convention of the American Institute of Architects which was held at Nashville, October 20, 21 and 22, was notable in many particulars. In 1885 the Institute met in that city with a small attendance. That at the thirtieth convention was not much larger, but the growth was seen in the character of the work done and in the representative attendance. In reviewing the work outlined for the coming year that which seems most important lies in the sanction by the convention for general changes in by-laws, leading to a better arrangement in the formation of local Chapters and their relation to the Institute. The plan adopted and successfully carried out by the Western Association of Architects was altered after the consolidation, and each succeeding alteration seems to have made the matter worse. The real trouble seems to be the different views held by members of the purpose and scope of the Institute. While one party holds that the Institute should be what its name implies, a body of past masters, others believe that the Institute is an association in which all professional practitioners, young and old, may gather and discuss measures and promote movements that tend to the furtherance of not only the professional welfare but the general good of the public and the artistic future of the country. In order to do this the methods must be left largely in the hands of the local societies, where local conditions of practice are best understood, and that their membership be accepted by the Institute with as few restrictions or requirements as is conservative with the maintenance of a proper ethical standard. The committee appointed is one of the best that could be selected for the work, and their report next year cannot fail to contain a general plan by which the standing of the membership in the Institute will be preserved and still under which strong State and local bodies will be everywhere organized.

**Important Arts and Sciences A. I. A. Committee.** A new and vigorous life in the direction of scientific investigation was proposed by Mr. Cook, of Memphis, and should be quoted here in part:

In proposing to you to create a standing Committee on Applied Arts and Sciences, I do so after a free and careful consideration of the necessity of such a committee, for when we look back only a few years we are surprised at the wonderful changes that are taking place in building construction. Old methods are being set aside for new ones, creating by these new methods new forces; strains are taking the place of pressure; the mechanics of construction as now applied necessitates a greater application of the arts and sciences and they are being drawn upon to their utmost limit—for instance, heat, light and electricity, the laws of acoustics, ventilation, sanitary science and how to arrest natural decay in all building materials. This march of progress should receive our serious consideration not as single individual architects only, but as a collective body of scientific and learned men. It, therefore, behooves us as such, the American Institute of Architects, to inquire technically and systematically as to results of these new forces, and as to results of the arts and sciences as applied.  
Continuing, Mr. Cook spoke of the many unknown quantities in the architects' problem and made a strong plea for their elucidation in the hands of special committees. It is such work as this as well as that pertaining to legislation that should receive the best efforts of the Institute; and as during a long life Mr. Cook has thought much and to the purpose, so now that he has brought the matter so clearly before the architects of the country he should receive full support, not on his own account so much as for the general betterment of professional practice.



## NATIONAL ARCHITECTURE.

BY WILLIAM MARTIN AIKEN, SUPERVISING ARCHITECT OF THE UNITED STATES.

THE purpose of this paper (which is intended to present certain considerations which might profitably affect the design and construction of our buildings) is not to revive the time-honored discussion of the evolution of a style of architecture for these United States of America, and then with a "whereas" and a "be resolved" to move that the matter be referred to a committee, with the recommendation that this American Institute of Architects do hereafter recognize only such and such proportions, or combinations of moldings or of materials, as rightly constituting a national style of architecture.

I have no doubt that there are members present today who have listened to, or perhaps themselves have read, carefully prepared papers on "An American Style of Architecture" before many of the earlier conventions of the Institute; certain it is that the contributors to periodicals, professional and otherwise, have agitated the subject for the past twenty-five or thirty years, with the apparent hope that the mooted question could be settled within a very few years. Nor is it my intention, as the guardian of the Government's interests in matters architectural, to predicate, or even to recommend, that the future courthouses, custom-houses or post offices throughout this broad land of ours should be designed in any one school, or that they should all be constructed from any one specific material, but I beg leave to offer the following memoranda of principles, tending to the begetting of logical architecture, and which having been proven in past ages, cannot fail to be of most lasting benefit to us in our efforts toward the realization of a national architecture.

The influence most potent in the evolution and development of architecture may be classified in three groups, namely, (1) geographical, geological and climatic; (2) religious and social; (3) historical, political and commercial.

As we trace the history of mankind we find that the geographical, geological and climatic conditions have been of prime importance everywhere: in Egypt, Chaldaea and Assyria; India, Greece and Italy; Spain, France and Holland; Germany, Norway and England.

Lower Egypt (which Herodotus calls "the gift of the Nile"), Chaldaea (a second Holland) and Assyria (a more undulating country) were built virtually of sun-dried mud and fire-burned clay. Syene and kindred quarries of Upper Egypt supplied the granitic rock for temples, tombs, pyramids and obelisks.

In India we are familiar with the Taj Mahal, the temples and water approaches of Benares, the rock-cut temples of Ellora and Elephantine. We have all studied the orders from the marble temples of Greece and her colonies.

In southern Italy we find frequent use of marble; in central Italy of peperino, tufa, travertine and concrete, and in northern Italy of brick and terra cotta.

Spain suggests the use of tiles for roof covering and for the ornamentation of interior wall surfaces, with granites, sandstones and limestones for the construction of walls, piers, vaults and bridges.

In France, the local material of Auvergne is volcanic rock; of Brittany, gray granite; of Normandy, the beautiful Caen stone, and, further to the north, brick and half-timber, or "pan-debois."

Dutch tiles would never be mistaken for Spanish, nor Dutch brickwork for that of northern Italy, and yet the architecture of Holland is essentially ceramic. The various portions of Germany show the use of limestones, sandstones, brick and half-timber respectively.

The log chalets of Norway, Sweden and Switzerland certainly give a clue to the geography, geology and climate of those countries.

English architecture, perhaps more than any other, has been affected by influences beyond these three primary causes, but it has been because of England's geographical position more than for any other single reason that these influences have affected her in a greater or lesser degree, and the paradox of the spirit of ardent investigation, coupled with that of the utmost conservatism, is surely as admirable an instance of "les défauts de ses qualités" or vice versa, "les qualités de ses défauts," as can well be imagined. It is very interesting to note next how the architecture of various nations have been affected on the one hand by religious and social influence, and on the other by the historical, political and commercial. The Egyptians built their residences of mud and clay and reeds and sticks in a most temporary fashion, but their tombs, which they accounted their true homes, were of the most enduring stone obtainable. There is a difference between not only the residences of Egyptians and Greeks, but — even more so — between their temples, for whereas the former constructed a multitude of columns and surrounded them by blank walls, the latter placed the edifice proper within and the columns without. The erection of theaters by the Greeks, primarily for the celebration of religious rights, was the beginning of the social influence upon architecture, and when the baths of Caracalla and Diocletian, the palaces of Augustus and Nero, the villas of the Emperor Hadrian near Rome, and of many wealthy private citizens at Pompeii, Baiae and other resorts were built, then the social side of life was most prominently expressed.

The religious wars or crusades of the middle ages undoubtedly produced marked results upon the buildings of western Europe by the gradual importation of eastern architects, mechanics and materials.

The feudal system was powerfully expressed not only in the fortified castles on the hilltops, but, as in Florence and elsewhere, within the very cities themselves.

It is a singular fact that, generally in countries where stone was plentiful and to be had of large dimensions, the interiors of buildings were gloomy, though the general impression may have been one of awe; whereas no interior has ever before or since equaled in joyous grandeur and cheerful dignity the dome of Santa Sophia which Anthemius built of brick for the Emperor Justinian.

From the tenth to the fourteenth century was the great church building age of Europe. At first the early Christians began by remodeling and adapting the Roman basilicas, then by using materials of pagan temples for the construction of their churches, and finally, after passing through the transition of the Romanesque and Norman (when the principles of the Gothic vault and pier and buttress were fully known), were evolved those magnificent productions of master minds, the cathedrals of Paris and Amiens and Bourges and Chartres.

Next came the age of the villa in Italy and the château in France; in the former they were grouped about the cities and always preserved certain formalities in their details and urban traits in their composition, and in the latter they were especially picturesque and suggestive of the country.

As civilization has advanced we notice that the religious impress has grown less, and then the historical, and afterward the political have each in turn lost somewhat of their former importance, while social and commercial influences have grown with rapid strides. Even in the time of the crusades, Venice, while furnishing ships and men for these holy wars, was not slow to seize the opportunity for enriching herself, not only in ducats, but precious materials of all sorts for the construction and decoration of her palaces and churches, not disdaining an occasional sacred relic.

Later on, Francis I. imported Italian architects and artificers into France, while the commercial spirit which has always existed in England developed the tendency to adopt (and sometimes to get) the best of her neighbors.

With us in America, especially in our larger cities, this commercial spirit clamors most continuously for recognition, and the high prices of land, the phenomenal growth of cities and the use of elevators, of iron and steel and fireproofing materials and of electricity, have forced upon us the solution of entirely new and untried problems.

In connection with these reflections upon the evolution of a national architecture in foreign lands, it is well for us to contrast the relative area of these countries with portions of our own United States, and to consider also the isothermal lines of the Old and New Worlds. Compare, for instance, the size of Old and New England; the Republic of France with the Lone Star State; the Kingdom of Italy with California; and at the same time remember how, in the Old World, the style changes with every few degrees of temperature, each geological deposit, and under all geographical conditions; and that the peristyle and pediment, the deeply overhanging cornice and the cortile, are indigenous to Southern climates, while the dormered roof and peaked gables belong to sections of rain and snow.

As a result of the Exhibition at Philadelphia of 1876, interior decoration and ornament certainly underwent a change in this country, and with the Exposition at Chicago, in 1893, a greater simplicity and refinement has appeared in the design of exteriors. In 1876 it was Japan and India that produced the effect upon us; in 1893 it was Greece and Rome — through the medium of the Ecole des Beaux Arts, at Paris. The greatest triumph of France at the Exposition of 1893 was not that achieved within the walls of the many buildings where she was represented, but in the influence of the Ecole des Beaux Arts in the general arrangement, proportions and details of the chaste and beautiful Art building and of those magnificent structures forming the Court of Honor. Where in all the history of Rome, of Greece, of London, of Paris herself is there anything comparable?

Therefore, bearing constantly in mind the manifold requirements and many-sided conditions which contribute to the healthy growth of our profession, let this success of 1893, where architects worked together with unexampled *esprit de corps*, be an incentive for even more admirable results in a logical architecture and, without question, the problem of our national architecture will solve itself in due time.

## INJUNCTION TO COMPEL REMOVAL OF WALL.

An injunction will lie to compel removal of wall of a building placed by a party on the complainant's side of a boundary, there being no adequate and plain remedy at law. And such injunction will be made perpetual, without resort to law to determine title, where the questions of title and right of possession are only incident to the question of boundary. *Norton vs. Elwert*, Supreme Court, Oregon, 41 Pacific Rep., 926.

## EVIDENCE OF THE VALUE OF SERVICES OF ARCHITECTS.

In an action for services as an architect in drawing plans, the issue being as to the amount to be paid, according to agreement, the introduction of other plans in evidence was, at most, harmless error. Testimony of a witness that he had obtained good plans of an architect for a less sum than that proved to be a customary rate of charges of architects was properly excluded. *Cooper vs. Gorgon*, Court of Civil Appeals of Texas, 23 S. W. Rep., 608.



# INFLUENCE OF STEEL CONSTRUCTION AND OF PLATE GLASS UPON THE DEVELOPMENT OF MODERN STYLE.\*

J. W. YOST, COLUMBUS, OHIO.

THE human race finds itself endowed with two distinct classes of desire—one to perpetuate, the other to enjoy its existence. What necessity requires seldom performs its office without administering to the desire for pleasure. Utility makes her demands to perpetuate life, art to provide enjoyment. While the capacity of the race to provide was exhausted in supplying its necessities, art was impossible. It was only when he had so far conquered the forces of nature as to leave some time and some energy unexpended, after his needs were supplied, that man could, or did, turn his mind to the contemplation, and his hand to the realization of that which was ornamental. It is only out of the surplus strength of hand and brain that works of art proceed.

That branch of art to which as architects we are devoted, had its origin in an attempt to beautify the buildings which primitive man found necessary for his shelter while alive, for his tomb after death, and for a place where he might pay respect to the supernatural.

Architecture is purely an art of space, as music is of time—an art of light, as music is of sound—an art which appeals to the eye, as music does to the ear—an art which produces its effect by composition of line, form and color, as music does by composition of rhythm, melody and elocution—an art which is removed from an aggregation of heterogeneous forms and inharmonious colors, as far as music is removed from the mingling of discordant and conflicting noises. Buildings which only pay respect to necessity, might be called the noise of architecture. Those which consider quality as well as quantity, introduce an organization of elements through which an artistic result may be produced. The varying ratio of energy devoted to the needful in a material sense, and to the desirable in a spiritual sense, measures the progress from the absence of architectural art to its highest development.

Architecture being an art of precedence, forms and motives, when once accepted tend to perpetuate themselves in use, even for long periods after their original meaning is forgotten—possibly in materials for which they were not intended, and in which they never would have been produced. It was many a century from the early timber buildings of Egypt to the mastabas of the fifth dynasty, and yet we have the crystallization of wood construction in these latter productions in granite and limestone. It was two thousand years from the wooden sun-shelters of Chaldea to the palaces of Essarhaddon, but some of the details familiar to the eye of the early ages, when both civilization and architecture were in a formative condition, were retained in the best materials the later Mesopotamian empires could furnish. Some of the details in palaces in Assyria, which were built two hundred years before the time of Pericles, not only were transported twelve hundred miles to the new civilization on the Mediterranean, but were carried from their origin in sun-dried brick to the marble of classic times. The guilloche from the palace of Assurbanipal, and which was older than Hellenic civilization, is still retained among us as one of our most effective ornaments.

But not greater was the conservatism which resisted any change in form and decoration, in the empires of antiquity, than is the conservatism of more modern times—even in our own country, in the nineteenth century. While we claim to be free to adopt any detail we please, we are, nevertheless, copying the detail of past ages—not only using it in the material where it reached its perfection, but in any other material that we have at hand, and without reference to whether the material is suitable for the detail or not, and without much thinking of the place and manner in which it was formerly employed.

The cause of this tenacity of historic forms rests, probably, in the fact that the most fertile mind—much less the average design—is not able to produce, from the use of the material and the purposes in the structure, an entirely original supply of forms, especially within the limit of the time allowed for the purpose. This demand for more than can be wrought out for the occasion causes continuance in the habit of copying—copying even thoughtlessly—from existing buildings and familiar designs. Again, through the sense of sight, forms fix themselves in the mind, and when the designer is called upon to use *some* form, he naturally turns first to those which “hang on memory’s wall.”

But while this tenacity of old forms must be recognized in the consideration of our subject, it is equally true that no material has ever become the chief, in a class of buildings, without lending the influence of its qualities to the design of the structures where it was used. Very soon a new requirement has arisen that could not be met by the old materials, and for which the new would answer—and the new was forced into prominence—lending a new quality, in proportion or detail, to the design.

But what is new must begin with the old as a basis, so that the style of our times will be influenced not only by new materials brought into use, but also by those which have been in use, and which have already lent their impression to the work of the past; because architecture is a record of past, as well as a statement of present conditions.

Our subject is undoubtedly intended to include not only past, but future influence as well, upon the development of style. The past will be historic, the future prophetic. There is not as much

to disagree about in that which has passed as in that which is to come, and yet no two persons will make quite the same selection of facts from which to form an opinion, even of what now exists—hence opinions must differ. But when it comes to that which is to occur in the future, the field for difference of opinion widens. It may be that opinions printed now will be read with much mirth—if they are read at all—after what is to happen has happened. But with all the past as a foundation, as a base upon which to support predictions of the future, it may be that some little part of the future can be estimated.

The materials of which buildings are erected always affect the designs to a greater or less extent. All historic styles of architecture possess certain peculiarities of form and detail induced by the character of the material, in the use of which the style was developed. Any style will have a definable relation to the materials available when it is undergoing formation. History presents some interesting proofs of the influence of material on style. The great buildings of the Nile valley, which have lived to carry the story of Egyptian civilization across a silence of so many centuries, bear unmistakable evidence of the abundance of stone at the beginning of Egyptian greatness, while the ancient Mesopotamian cities could rise from their earth-bound sleep of 2,000 years and exhibit their buildings to prove the scarcity of stone in that country, when Ourkam bid his nation of thinkers erect temples for the worship of Istar. Even the Greek, who crystallized the toys of his youth in the monuments of his manhood, never forgot the timber which built the shelter for his ancestry, although he petrified his houses of wood into temples of marble.

The wonderful difference between the proportions of modern buildings since steel construction has come into use, and those which were the prevailing custom prior to that date, is noticeable upon all hands, particularly in this country. The most remarkable of these changes is the extraordinary height to which buildings are now carried in some American cities. Another noticeable change is the great unbroken window surface closed in by plate glass, which prior to the present age was impossible. Not only the exterior, but the interior of buildings, has been greatly changed by reason of steel construction. Vast floor spaces are now opened up, with but a few small supports for what is above, and the same is repeated story after story. To whatever extent plate glass has made it easier to furnish light, its use has resulted in great benefit to humanity, whether it has overturned former architectural notions or not. To whatever extent steel construction has made it possible to have lighter, better and safer buildings, more ample and better arranged floor space, more comfortable and safer offices, it has been a benefit to mankind, even though it may have entirely overreached our ability to govern it as an architectural element. No more need be said of the possibility of extending floor space without being broken by roof supports than to call attention to the main hall of the Liberal Arts building at the Columbian Exposition at Chicago—a room some four hundred feet wide, twelve hundred feet long and two hundred feet high, without a post or pier anywhere to break the well-nigh boundless continuity of floor space. In this direction it may be said that steel construction opens up a possibility of greatness hitherto unknown. This is one decided influence already realized. If you say it is more a feat of engineering than of architecture, I say in reply that this is only because architecture has not been able as yet to measure up to its privilege, under the reign of glass and steel. While these possibilities have had an extensive influence upon the height of buildings, the extension of rooms and the question of light, considered in a practical sense, it is perhaps not the direction in which we are supposed to discuss this question.

Let us turn to the influence that steel and plate glass have exerted upon the exterior of these buildings. Here their influence is written in legible lines by the numerous *attempts* which have been made to vary the proportions of historic styles of architecture to fit the requirements which have come with the use of these two hitherto unknown materials. These *attempts* are mostly failures as viewed from an artistic or architectural standpoint—no, they are not failures, they are only unsuccessful efforts. They are not failures, for they prove to us what *not* to do, and that we must know. Their influence is negative, but it is wholesome. They prove to us that our ideas must be reformed and expressed in a different architectural language. Up to date we have witnessed the building of walls—or what seemed to be walls—200 feet high, supported only on small piers, scarcely able, if they *were* piers, to sustain their own weight. We have tried hard to admire the result, but have failed. The untruthfulness of the expression was too evident. Then, we have built walls very plain and simple, and that seemed to have a negative kind of merit, but we were not satisfied with it. Next we have tried to decorate the façades—supposed to be walls—with forms from one style of architecture or another, and, like the man with the roads in Arkansas, whichever style we have tried, we wish we had tried some other one. Then, we have lost our patience and decided that steel, as a building material, was a destroyer of our peace, and we have tried to get city councils to pass ordinances, saying that steel construction should not be allowed. We have tried to drive it out of town, by limiting the height to which buildings might go. Then when we find these efforts a failure, we go back and try some other style of architecture, and perhaps we plaster the details of a Greek temple or Venetian palace all over a sixteen-story front, and try to comfort ourselves with the fact that we have done as well as anybody else. We place columns one, two and three stories high, upon the top of each other, or by

\* Series of papers read at the Thirtieth Annual Convention of the American Institute of Architects, Nashville, Tennessee, October 21, 1896.



interspersing them with a few tiers of impossible arches, resulting in a sort of architectural grille, which looks as if it ought to be built lying down, as it apparently has no ability to stand up. And we feel real mad at some newspaper critic for saying that "it looks as though the builder had got hold of the elevation with the wrong end up." After this we meet our brethren of the profession afflicted with similar tribulations, and we solemnly resolve that tall buildings are an architectural monstrosity. This seems to be the history of the past. It is largely a record of our failure to accommodate our architectural notions and the details of historic styles to the new conditions induced by the use of steel and plate glass. But what of the future?

It so occurs that plate glass and steel construction are directly opposite in character, and yet both work toward the same end. The steel may be said to be the positive quantity, and the glass the negative quantity. The steel is the solid—the glass the void. The glass can fill the space which the more positive material does not care to occupy. The great strength of steel posts tends to reduce the width of piers, the glass stands ready to fill the increased space between. The strength of steel girders tends to widen the space between posts, and the glass is ready at hand for the greater duty of closing the larger opening. It may be said, therefore, that if steel construction is the master, plate glass is the faithful servant. The great strength of steel has a tendency to reduce the solids and increase the voids, to reduce the thickness of walls and decrease the depth of shadows. The character of posts and lintels is such as to induce the use of straight lines, and the same influence is exerted by the difficulty in using curves in the windows filled with plate glass. The influence of these characteristics would be in the direction of angularity of style.

Being a material quickly affected by fire and weather, steel must be inclosed by some shield for protection. Instead of its brick or terra cotta covering attempting to preserve the appearance of a wall, when it has lost the substance of a wall, it will, by and by, fall into its true position as a covering for the steel, and begin to take the form of and exhibit, probably in conventionalized form, the detail natural to the steel construction itself. Already it is seen that to attempt to make a building the frame of which is steel look like a stone building or a brick building is a caricature on all decent building art. It is not less an architectural fraud—an artistic monstrosity—to imitate a brick building by the forms used, when steel constitutes the chief building material, and when the brick, if left alone as it appears, would not stand for a moment. But as the steel will give certain suggestions to the form of the covering, which are natural to the steel construction and not to the covering material, the material used for the covering, on the other hand, will tend to give to the design certain of its own peculiarities. Hitherto the covering has practically given all and the steel nothing to the detail. The constructive forms of the past have been continued in use, as well as the decorative motives, whether they have been suited to the material in which they are wrought or not.

Sixteen-story buildings have sought to avoid the appearance of height by adopting some manner of design by which their real altitude could be partially concealed. Breadth and comparative lowness have become such desirable qualities, in our minds, that we have been willing to make that seem low which was not low, and solidity and repose have been so desirable that we have sought to supply the appearance of these qualities to buildings where the whole purpose was in the opposite direction. But it has become evident to the intelligent designer that we must stop trying to make a twelve-story building look like a distorted Greek temple, and must stop trying to use forms which must be distorted in their proportions in order to fit requirements at variance with any which such forms can properly answer. The fact is that the problem of a design in steel and plate glass for a tall building is a new one, and it cannot be solved by the old rules. There is no use trying to convince ourselves or anybody else that the little piers laid up with brick are real piers. We see at a glance they are not. They would be crushed instantly if they were. There is no use trying to lead anybody into the idea that a brick or stone wall can be laid across a twenty-foot void, with nothing to support it. There is no use trying to conceal the fact that what we see is only a covering of the real building material, on whose efficiency the structure depends. There is no use trying to hold longer to the antiquated notion that only comparatively low buildings are architecturally creditable. There is no use, either, in our entertaining the idea that because steel cannot be successfully used in proportions suitable to stone, that therefore steel is not a good material for architectural purposes.

The fact is that the wall and pier and buttress, hitherto the strength and support of the building, have no reason for existence under the new conditions. It is therefore possible to conventionalize them as the Greeks did the wooden cornice when they built in marble; or it is possible to omit them altogether as features of the design, as the builders of the middle ages did with the entablature when they had no further use for it.

There seems to be four parts to be disposed of in the design for a modern steel building. First, the continuous posts; second, the lintels between stories; third, the panel of brick or other material which fills the space between posts and lintels; and fourth, the windows. It seems to me that while the steel must be concealed from the elements, it should not be concealed in the design, and that the surface of the building should take the form of a covering of continuous posts, and a covering of horizontal members between posts and the filling in of the panels which intervene. It would seem, also, that not one of these three should be so

designed as to make believe that it is the support of the structure, but the covering of posts and lintels should show that it is a covering, and a covering only, of that which is the support of all. It would seem, furthermore, that this screen and covering should take on its true character and appear to be what it really is, and not pretend to be a wall.

The reflex influence of this change from the old ideas in the design of buildings where steel is really used will be a tendency to harmonize the design of other buildings to express an architectural relationship with them.

Thus we have the influence of steel construction and plate glass: first, the tendency to greatness, especially in the direction of greater altitude and greater dimensions for interiors; second, a tendency toward angularity of style; third, a tendency to better illumination; fourth, a tendency to decrease ponderosity of structure; fifth, a tendency to entire reformation in the use of forms and motives of ornaments.

In accepting—as I think we must accept—radically new ideas of architectural propriety and fitness, we do not—must not—lose sight of the principles upon which all architectural art is founded, without reference to the style in which the expression is made.

In architectural design the elements are few—the combinations infinite. Line, volume, texture, light, color—these are the notes which compose all the wonderful harmonies in the world's architecture, by variation, combination and organization. Each element has its own language—its own influence in the picture—its own way of affecting the sensibilities, according to its own unvarying law. The aggregated sensation is an emotional resource which we call feeling. The designer may play upon these notes like one who sings a song by air, knowing nothing of the science of music. He may not even think why any element of his design produces a given effect. He may not even know that it does, but a master of design must be a master of its elements, as a great artist must know the nature and effect of each pigment he uses, and a musician must understand the scales which are the basis of all musical composition.

If in a building we desire an effect of dignity or of frivolity, of severity or grace, of boldness or delicacy, of tenderness or refinement, we must make use of those combinations of elements which will produce the desired result. A design with equal lines—be they ever so long, equal volumes—be they ever so large, colors in equal key—be they ever so rich, is only confusion and weakness. It has the evenness of death, no expression, and is devoid of feeling. In the ideal design, the longest lines must be assisted by shorter lines grading down to the shortest that will distinctly reach the eye. The great volumes must be judiciously contrasted with volumes less and still smaller in size until they reach the minimum that the eye can readily distinguish. The cube must vary to the line in one direction and to the sphere in the other. The color must vary in key to produce a balance between extreme intensity and the lowest key definable to the eye. These elements, properly marshalled and proportioned, are nature's contribution to the design. But all these when carefully balanced, until the sharpest criticism fails to find a point of attack, only produce a result like a beautiful organism ready for action, but awaiting the breath of life. That which must make this image of beauty a living reality—that which must animate and vitalize it, is the human element in the picture—the spirit of the designer who speaks life into the dead clay, or steel, or stone, and gives it a voice to join in the song that, through the greatest of the arts, creation sings for man.

DANKMAR ADLER, CHICAGO, ILLINOIS.

The writer of an article recently published in *Lippincott's Magazine* summarizes the law of architectural design in the sentence "Form follows function," and endeavors to condense into three words what others have vainly tried to annunciate in various treatises and in bulky volumes on the philosophy of art. If it was necessary to state in a three-worded aphorism the entire law of architectural design and composition, nothing could have better suited the purpose than the words quoted above from the pen of that clear thinker and brilliant writer, Louis H. Sullivan.

Every architectural work has a "function," a purpose which has called it into being, and its success is measured by the degree of approximation to fulfillment of "function" which characterizes its "form."

From this one might infer that it is only necessary to divide into a few classes the functions to be served by architectural structures, and to determine the form best adapted to each, and thus develop an infallibly correct system of architectural design from which none may deviate without incurring the reproach of ignorance and lack of culture.

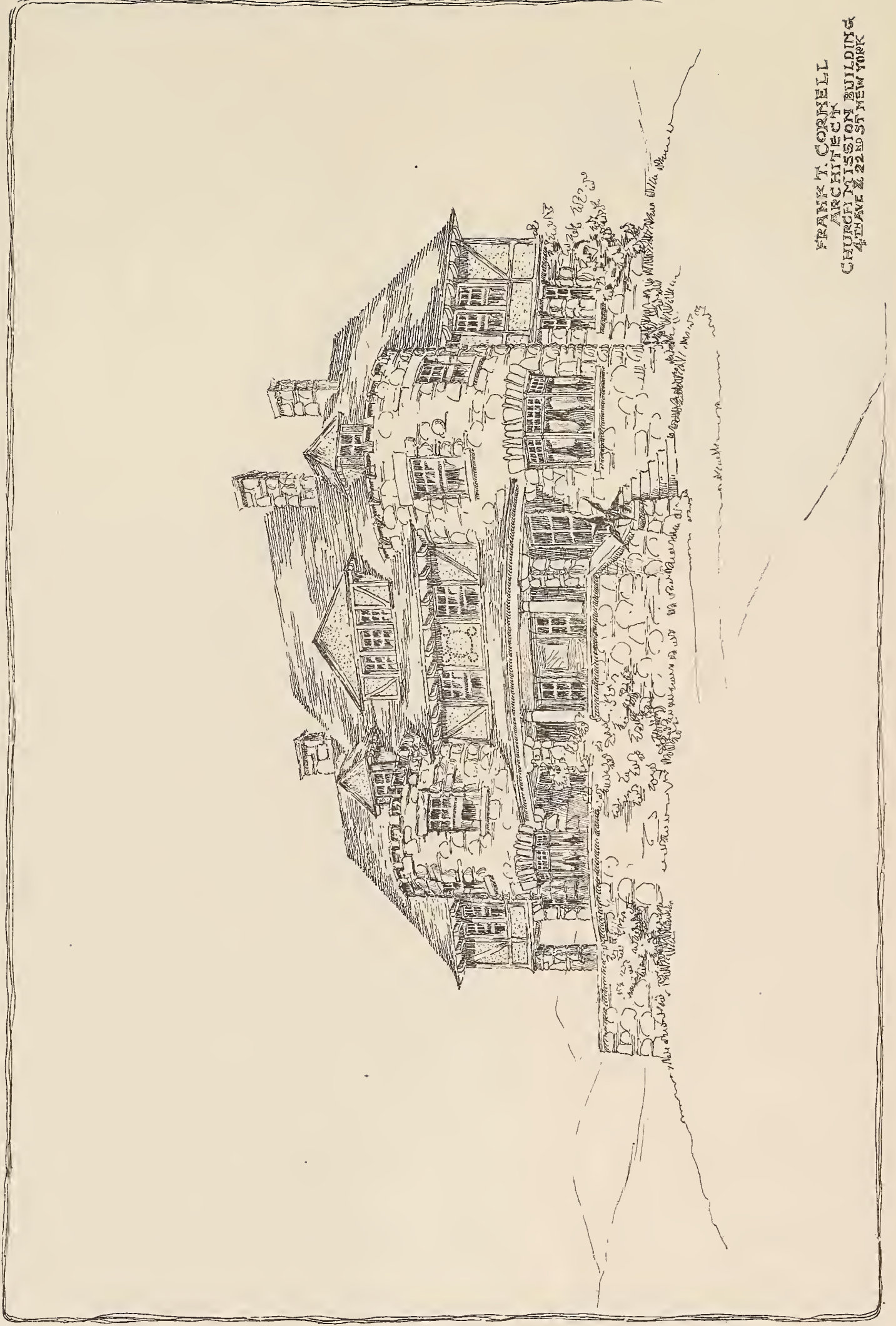
We would then have an architecture somewhat more scientific and vastly more practical, but as trite and as devoid of the interest imparted by the creative impulse as is the architecture founded upon the principle, *Form follows historic precedent*, which stamps as barbaric every structure for which the architect has failed to provide an academically and historically correct mask and costume, and which treats as heresy an attempt to do, not as the Romans did in the year 1, but to do as one thinks the Romans might have done in the year 1896.

Returning to Mr. Sullivan's aphorism, we find that he bases it upon studies and observations of nature, which carried a little further show that although the common function of all organic creation is to maintain and propagate the various species, yet an ever-changing environment has produced an infinite number of







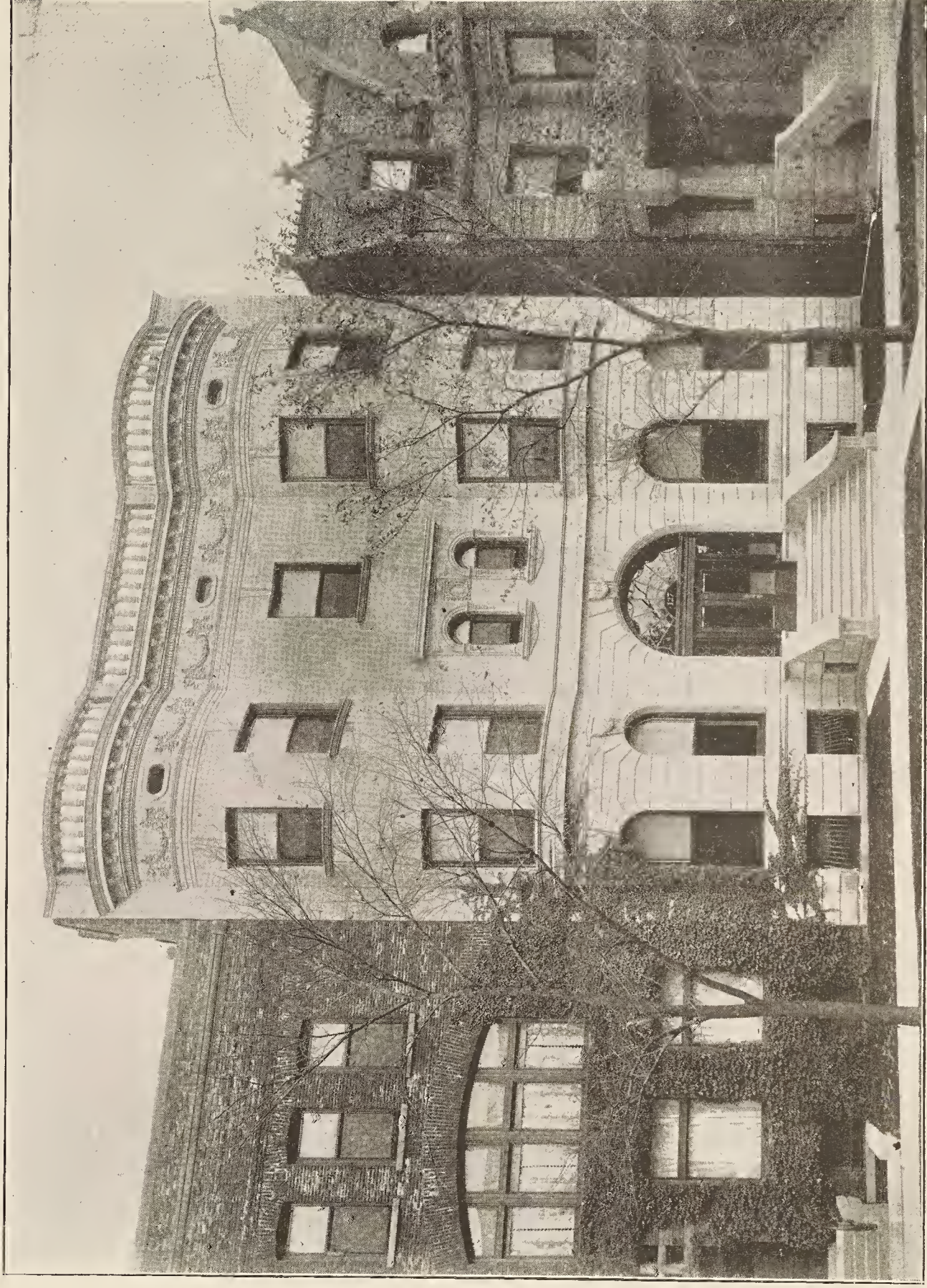


FRANK T. CORNELL  
ARCHITECT  
CHURCH MISSION BUILDING  
4TH AVENUE & 22ND ST NEW YORK









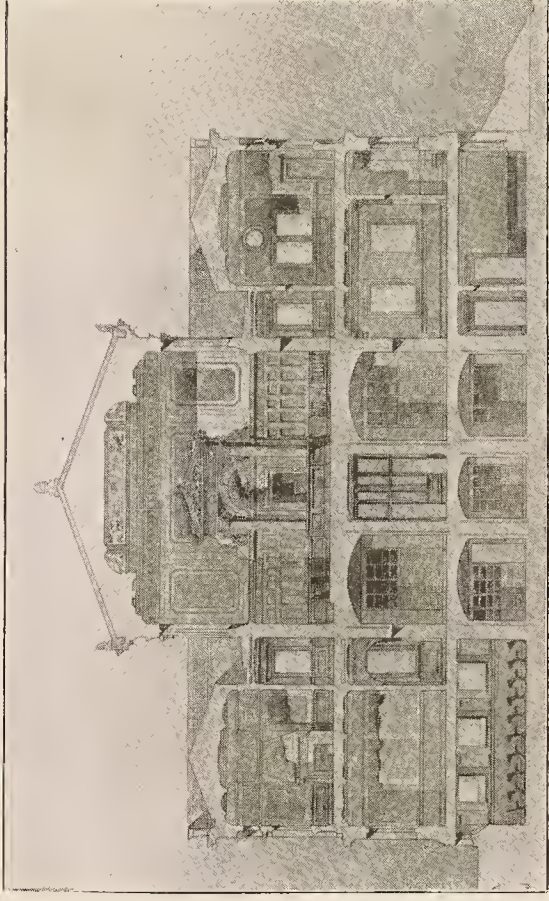
RESIDENCE OF W. D. KERFOOT, CHICAGO.

J. N. TILTON, ARCHITECT.

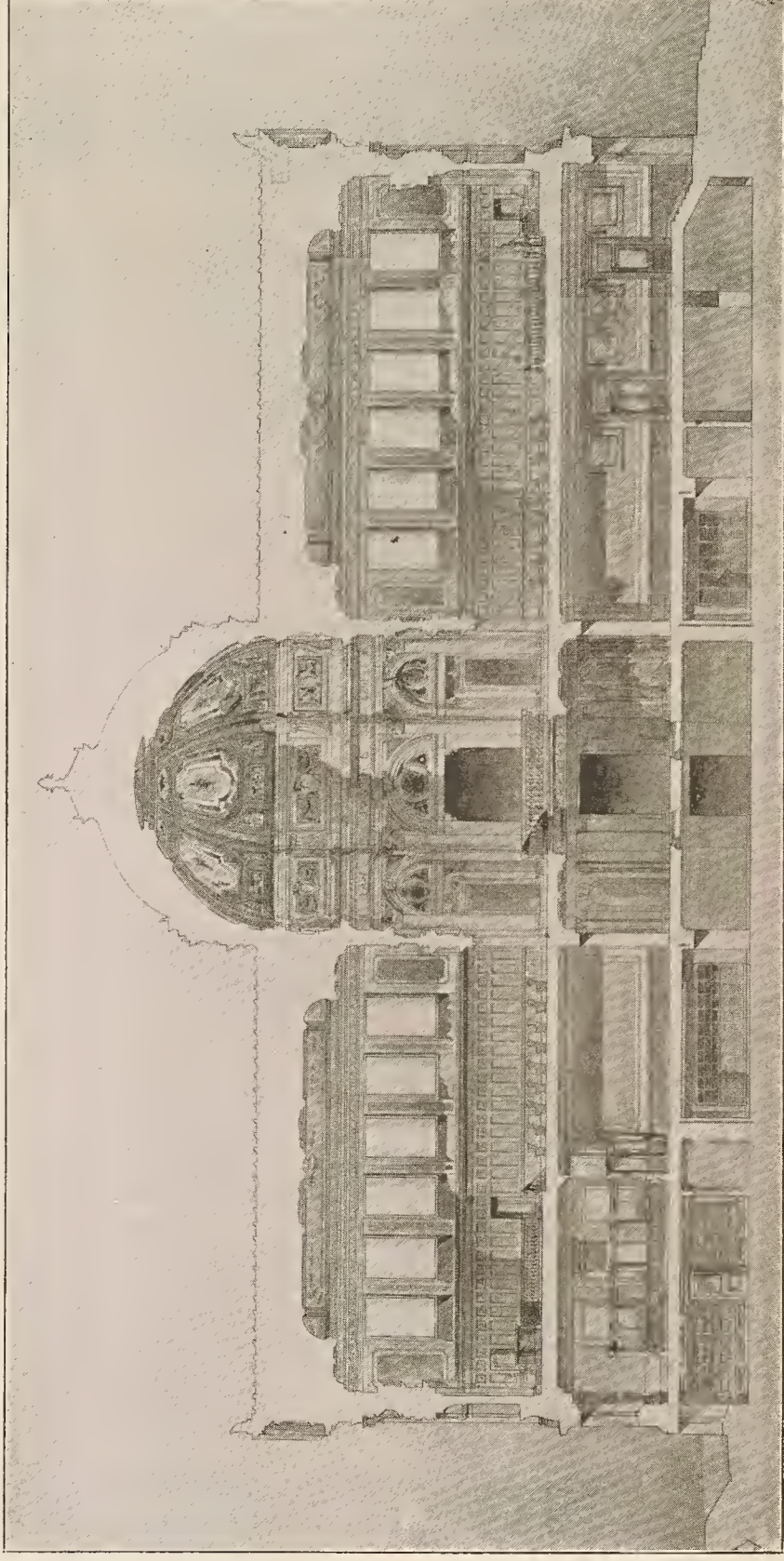








TRANSVERSE SECTION.



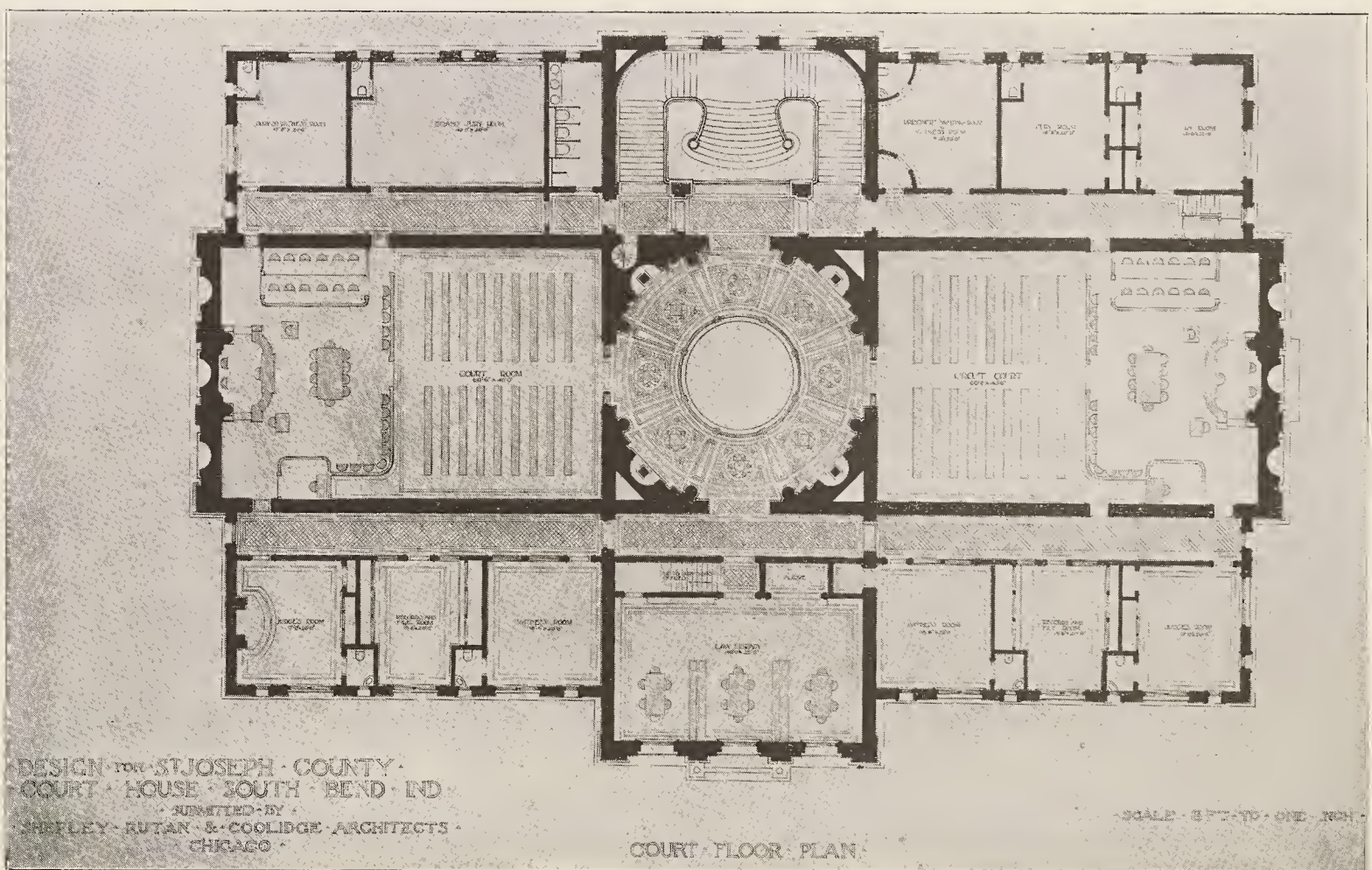
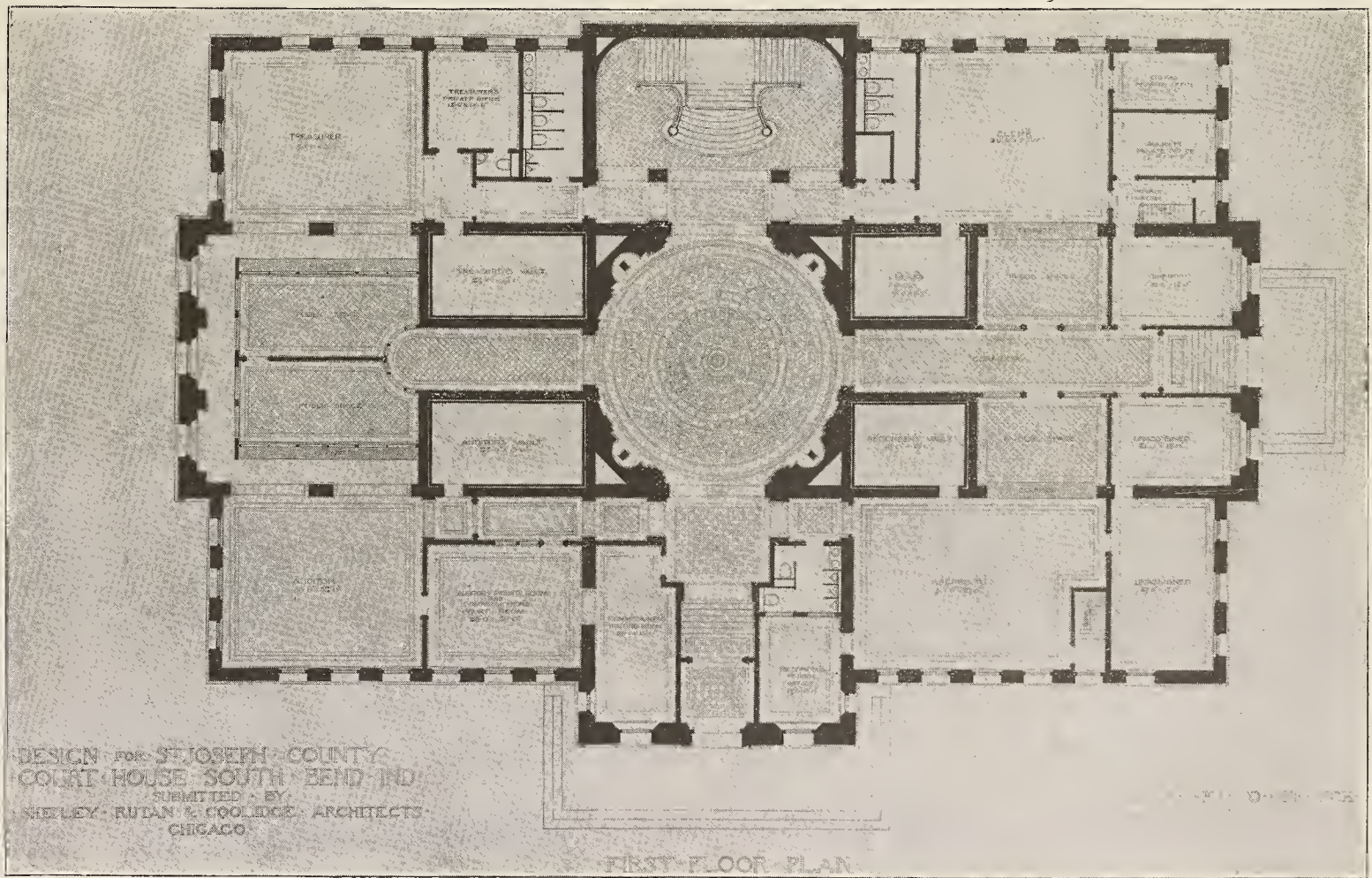
LONGITUDINAL SECTION, ACCEPTED DESIGN, COURTHOUSE, SOUTH BEND, INDIANA.

SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS.









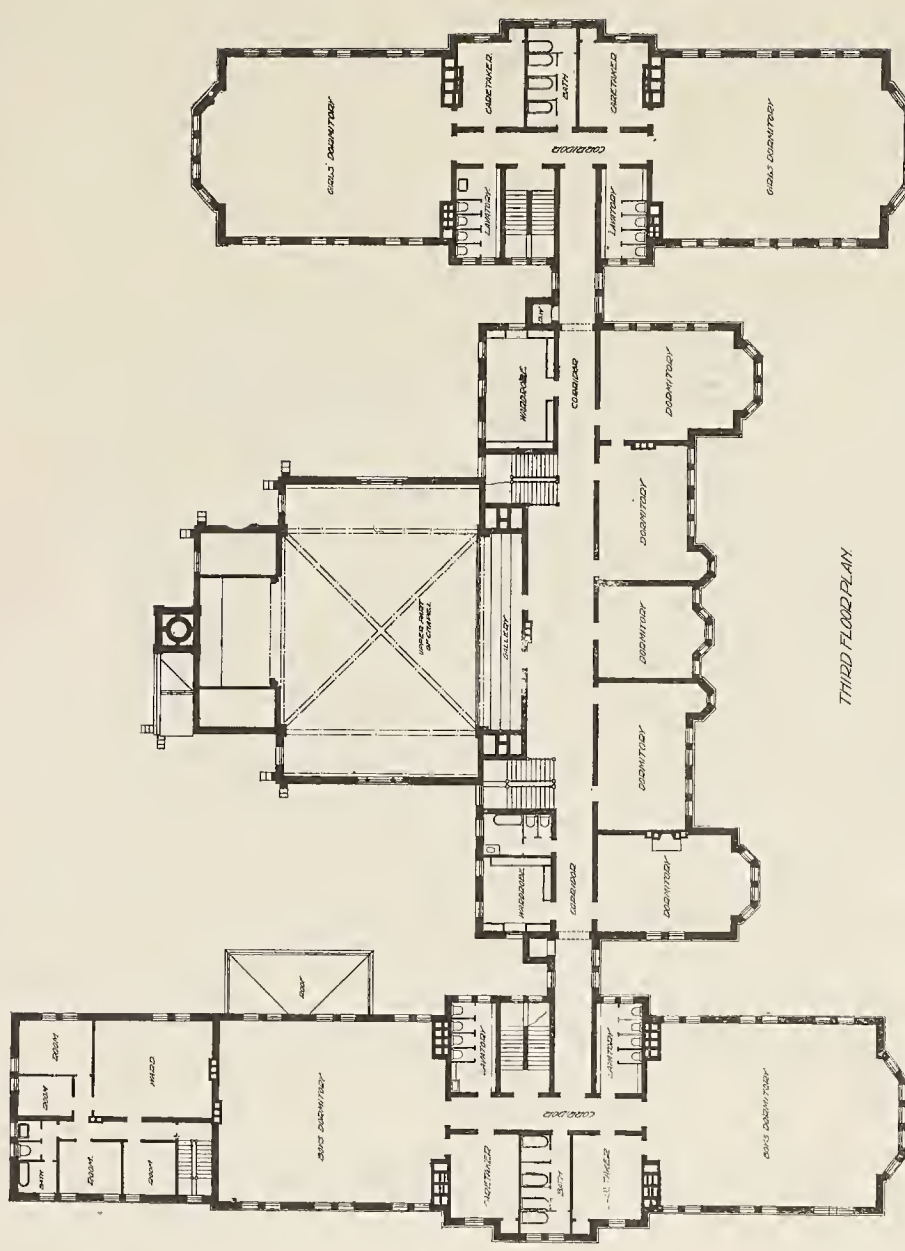




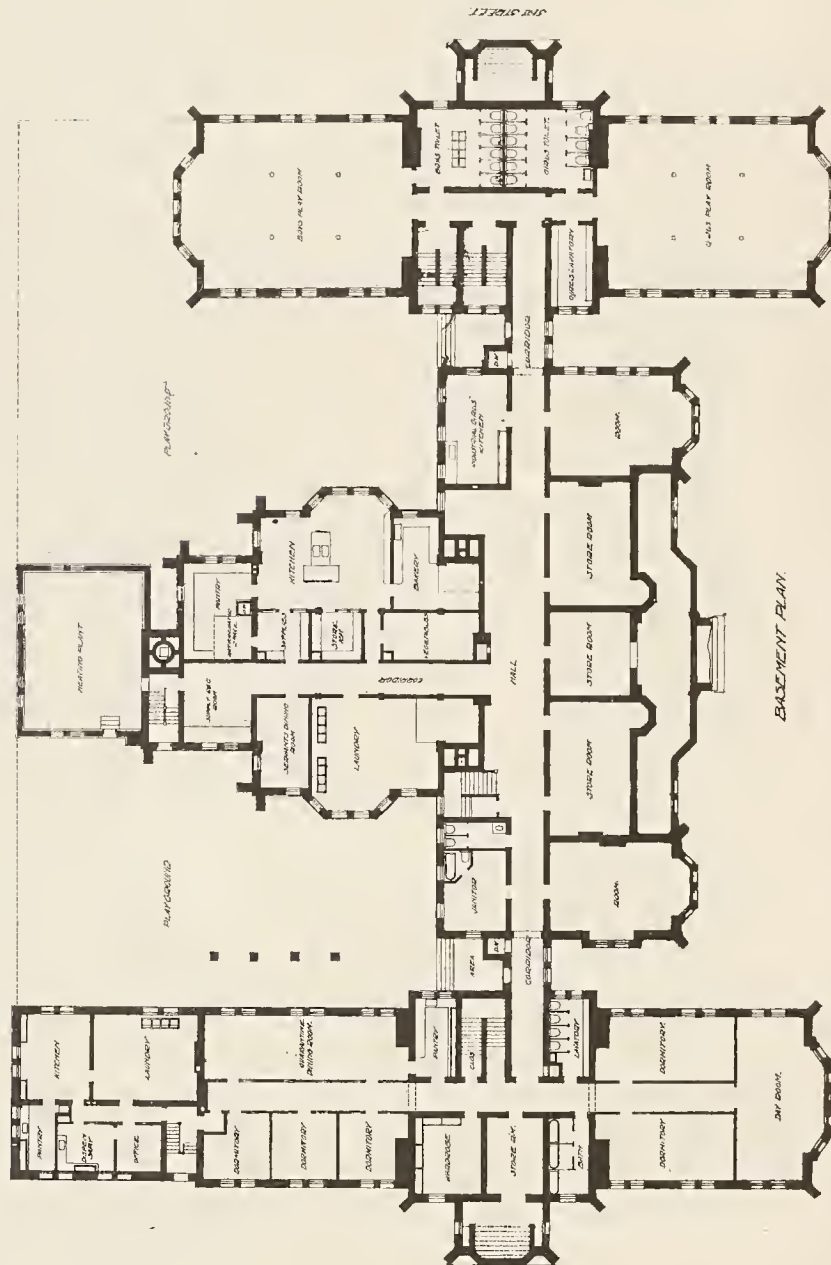




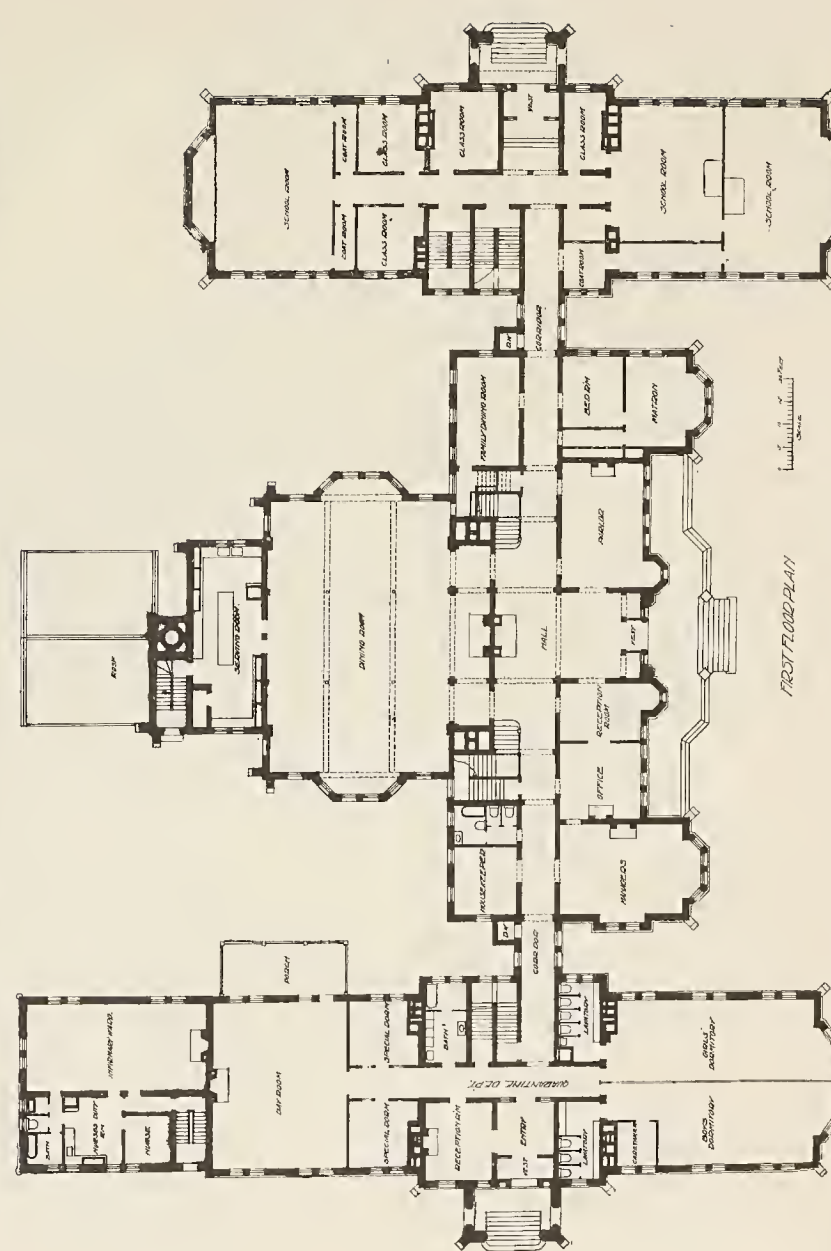
SECOND FLOOR PLAN



THIRD FLOOR PLAN



BASMENT PLAN



FIRST FLOOR PLAN

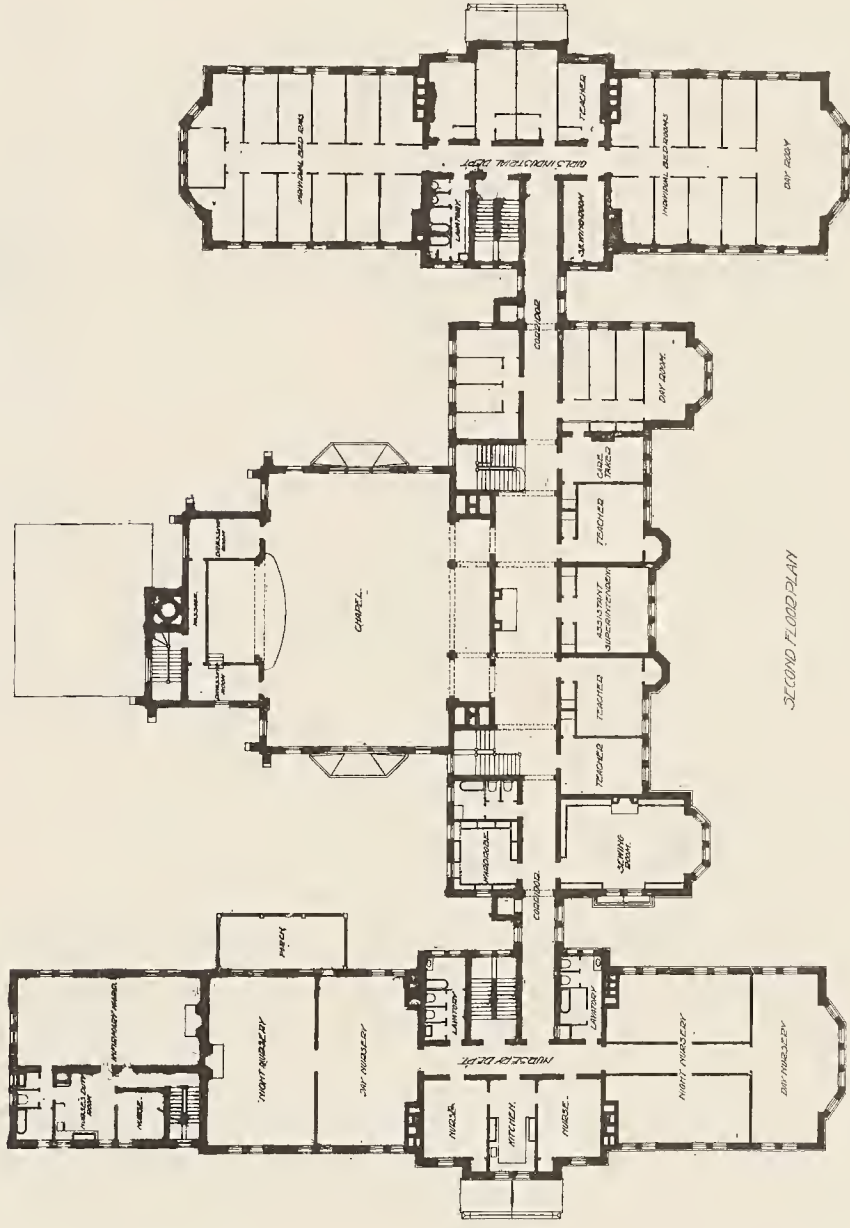
PLANS, HOME FOR THE FRIENDLESS, CHICAGO.

CHARLES H. FROST, ARCHITECT.

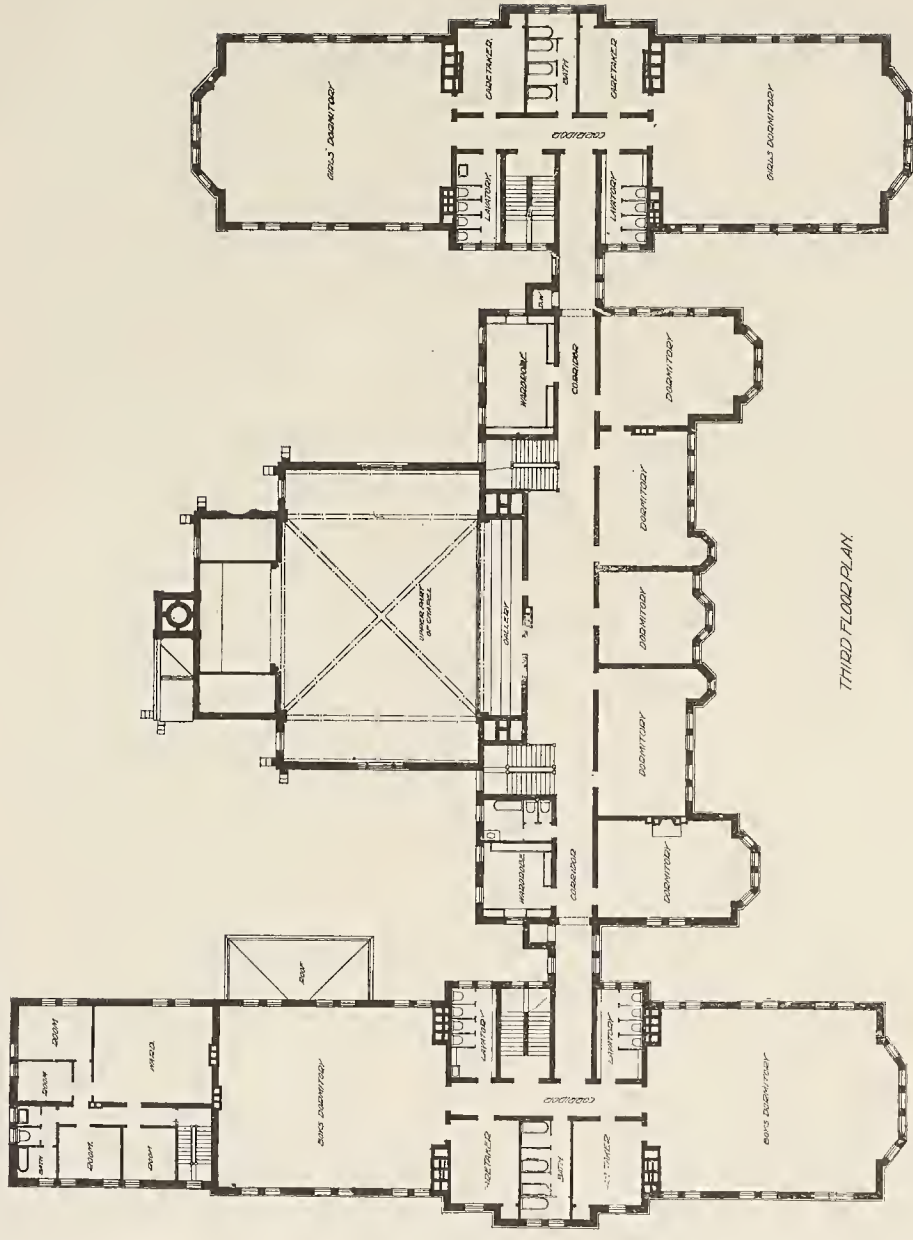




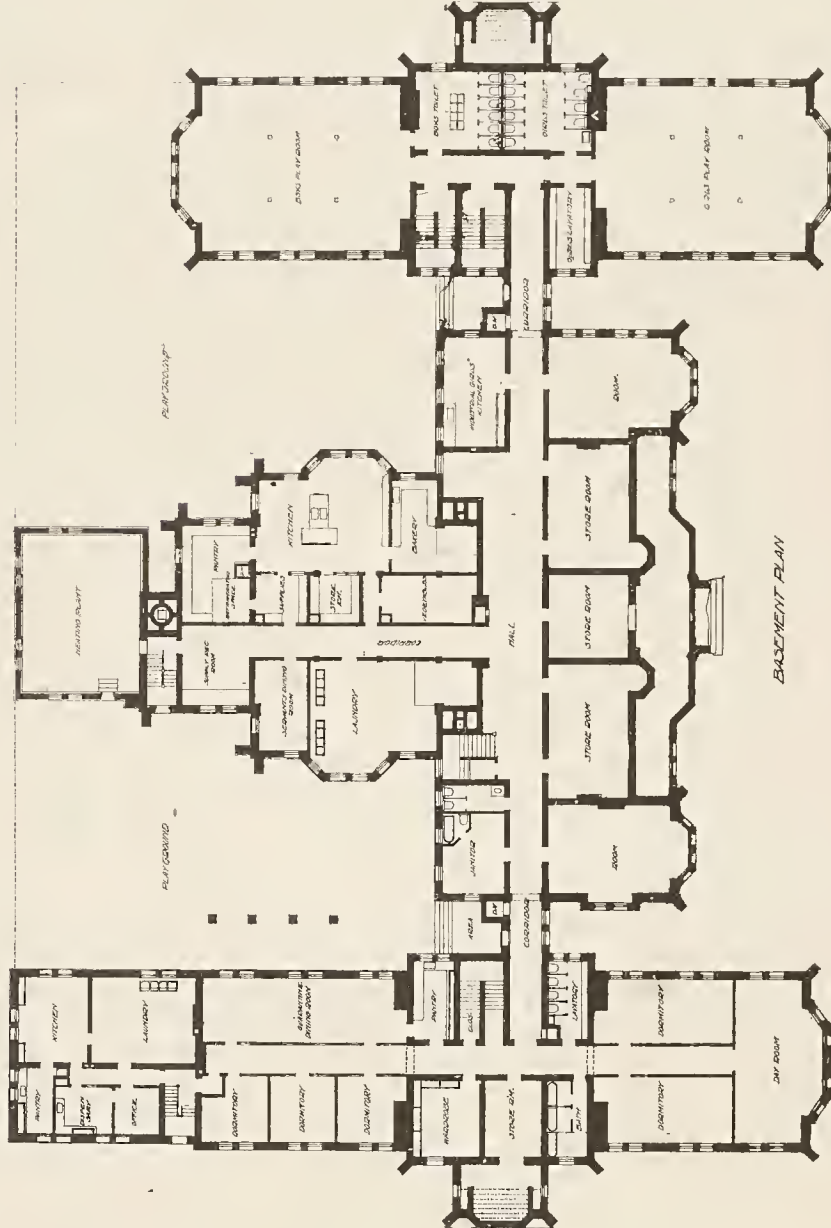




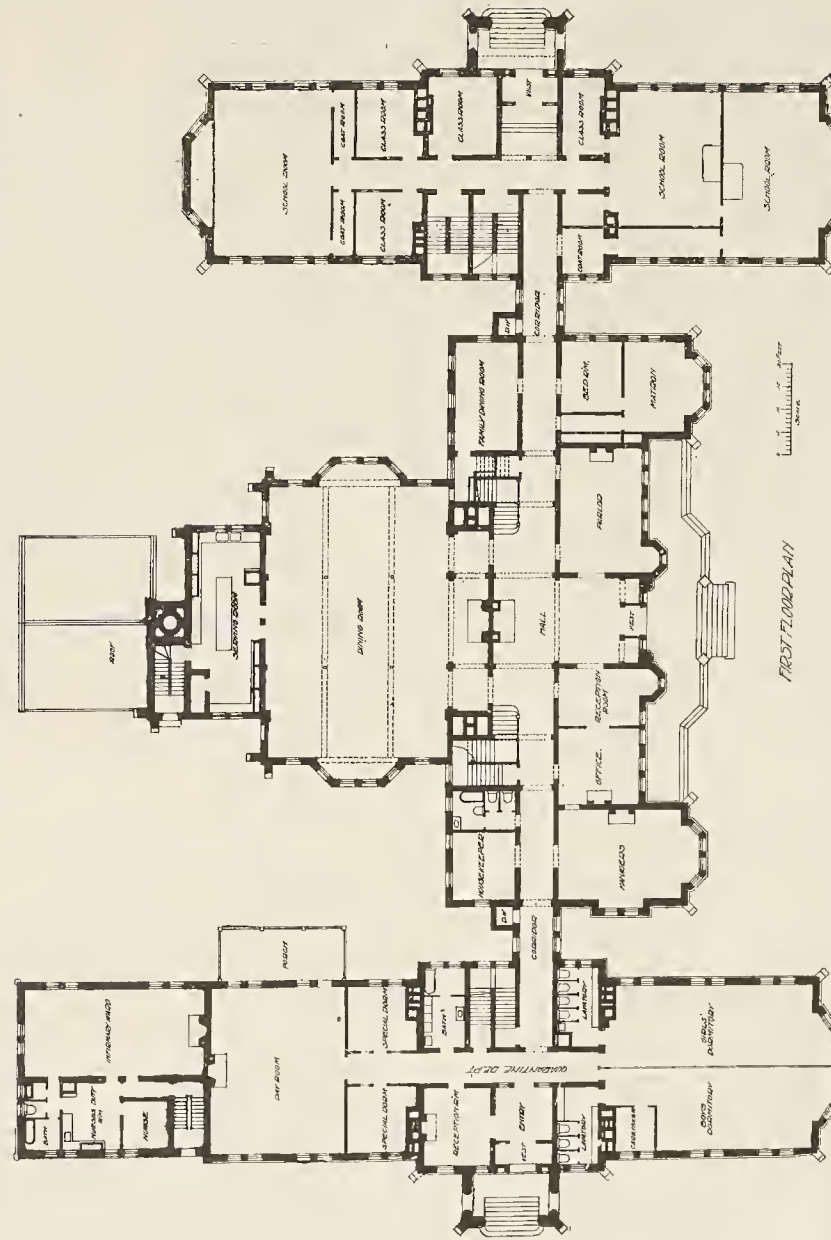
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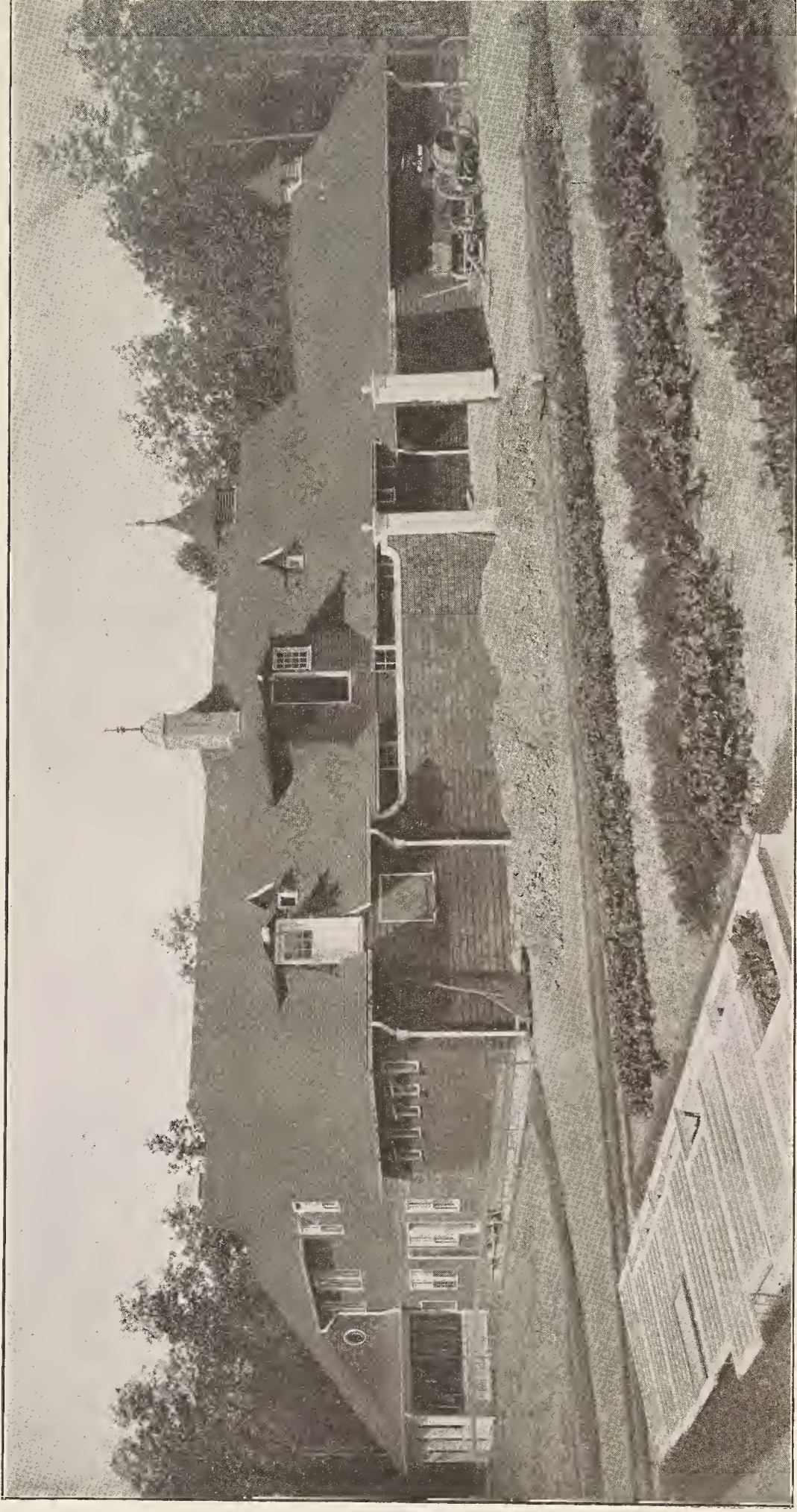












STABLE FOR CYRUS H. MCCORMICK, LAKE FOREST, ILLINOIS.

JARVIS HUNT, ARCHITECT, CHICAGO.





RESIDENCE OF CYRUS H. MCCORMICK, LAKE FOREST, ILLINOIS.

JARVIS HUNT, ARCHITECT, CHICAGO.









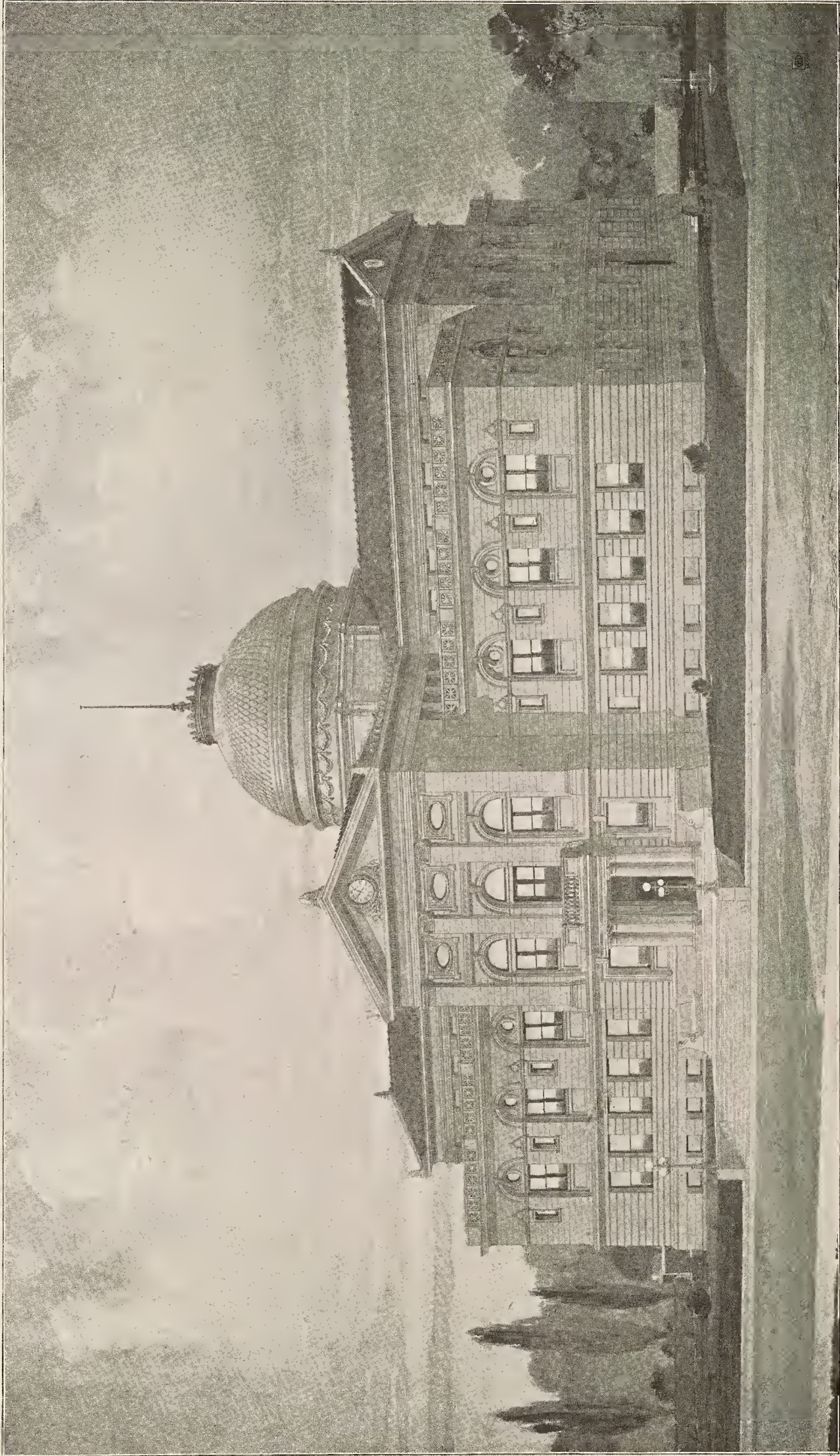
HOME FOR THE FRIENDLESS, CHICAGO.

CHARLES H. FROST, ARCHITECT.









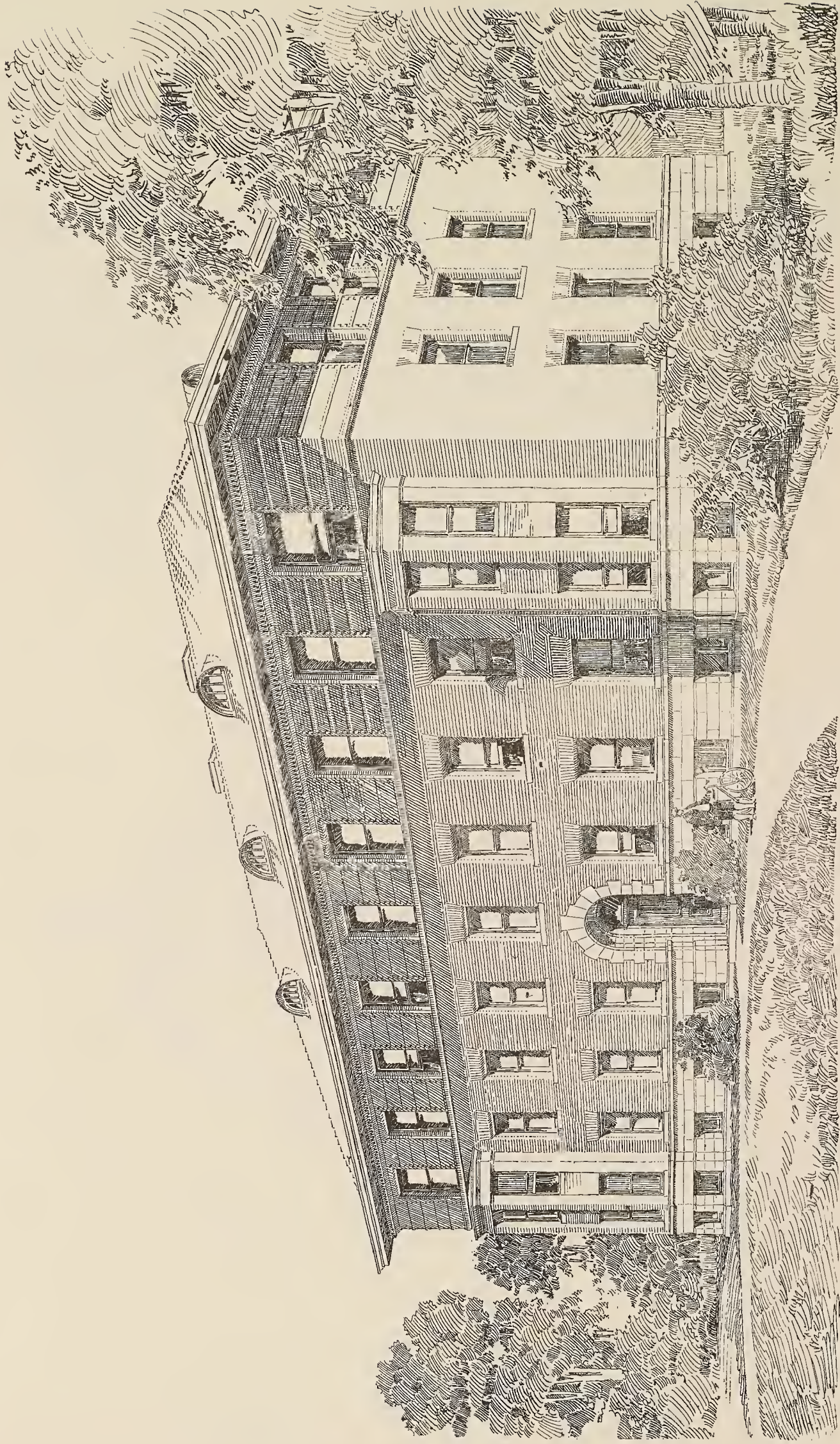
ACCEPTED DESIGN, COURTHOUSE, SOUTH BEND, INDIANA.

SHEPLEY, RUTAN & COOLIDGE, ARCHITECTS.









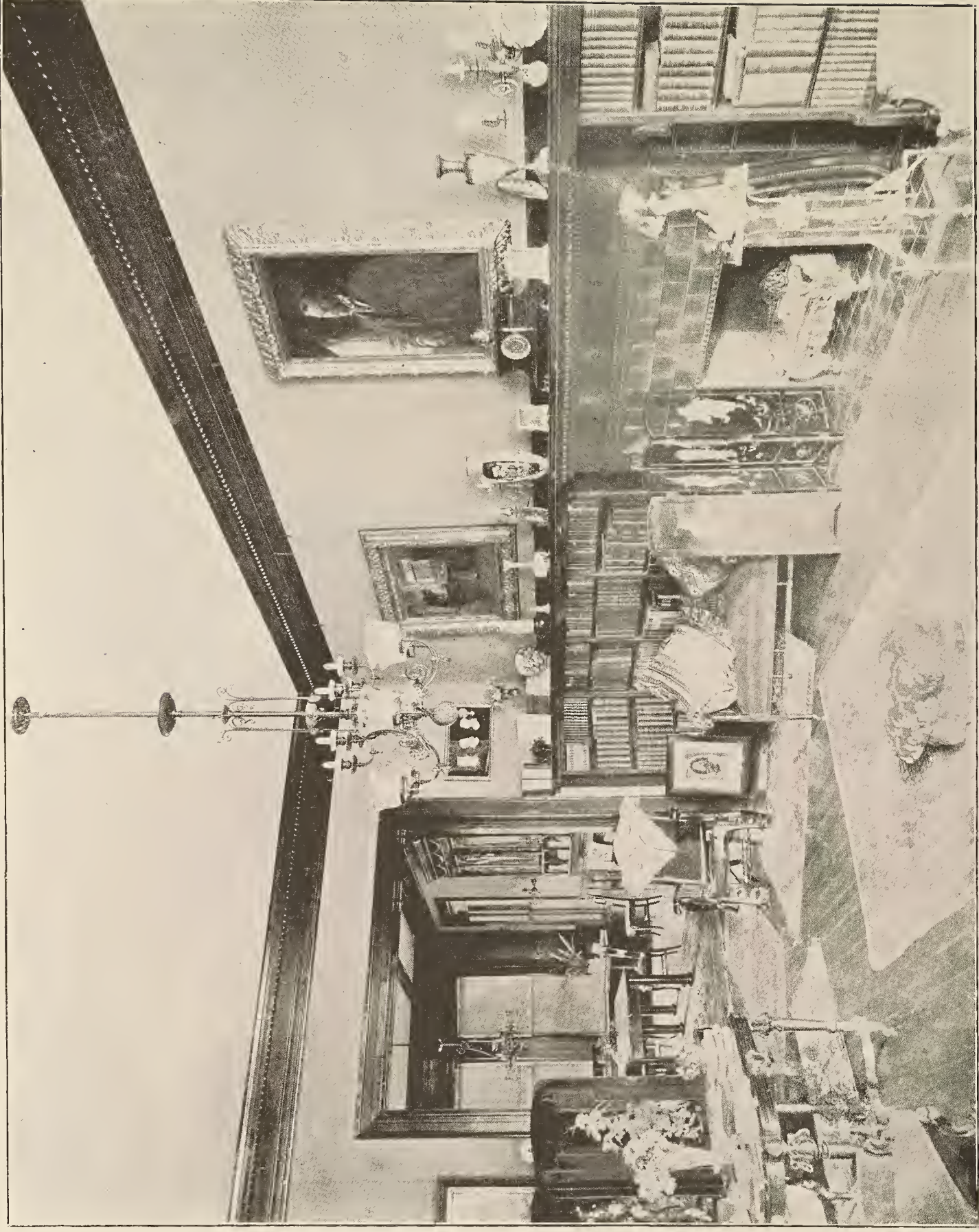
DORMITORY BUILDING, MORGAN PARK ACADEMY, UNIVERSITY OF CHICAGO.

DANKMAR ADLER, ARCHITECT, CHICAGO.









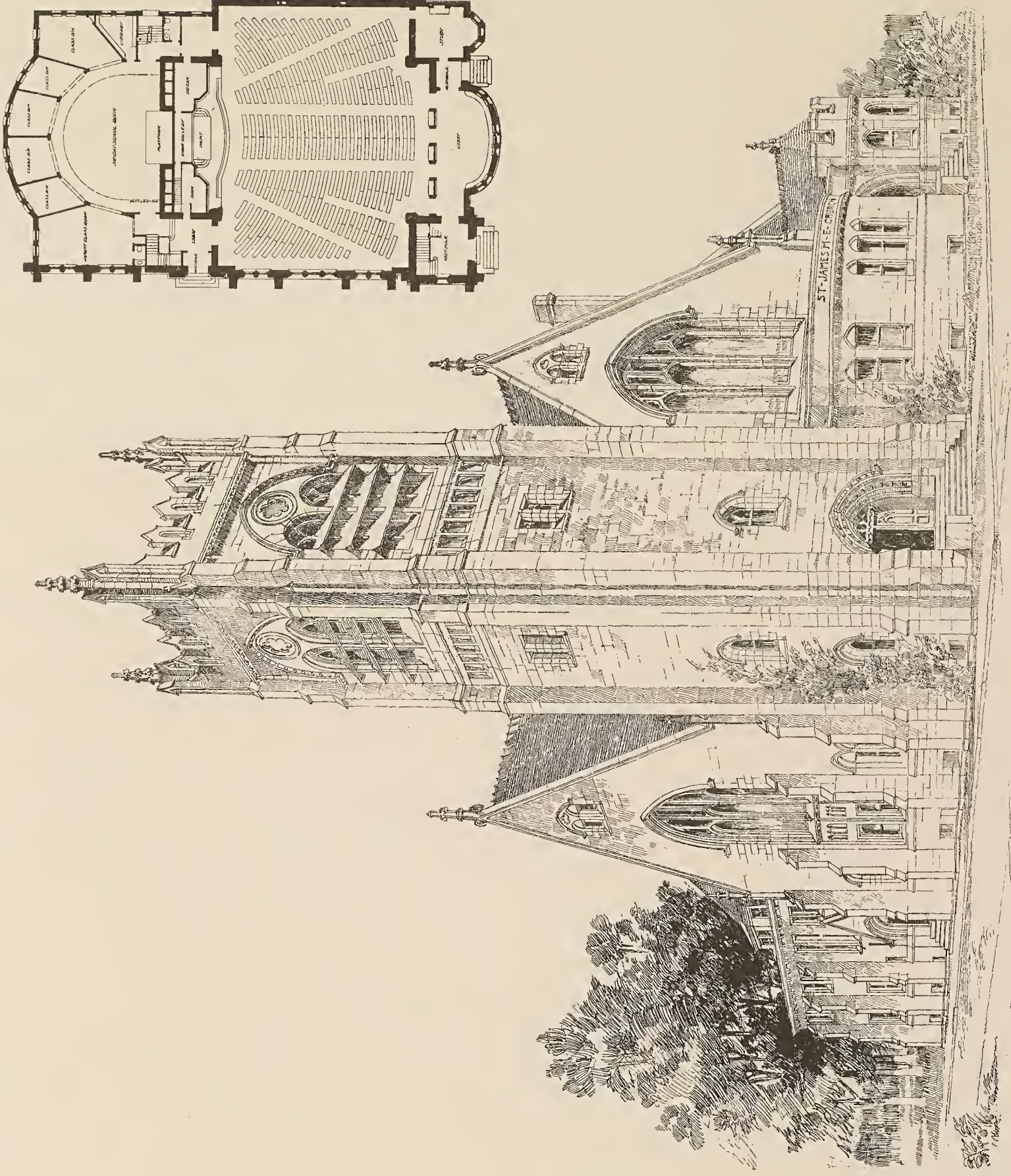
VIEW IN LIBRARY, RESIDENCE OF W. D. KERFOOT, CHICAGO.

J. N. TILTON, ARCHITECT.









CHAS. S. FROST, ARCHITECT

ST. JAMES M. E. CHURCH, CHICAGO.

CHARLES S. FROST, ARCHITECT.







species and innumerable differences in individuals of each species.

Therefore, if "form follows function," it does not follow in a straight line, nor in accordance with a simple mathematical formula, but along the lines of curves whose elements are always changing and never alike; and if the lines of development and growth of vegetable and animal organisms are infinitely differentiated, the process of untrammelled human thought and human emotions are even more subtle in the differences and shadings of their manifestations, while the natural variations in conditions of human environment are as great as those which influence the developments of form in the lower organisms; and human work is further modified by necessary artificial conditions and circumstances.

Therefore, before accepting Mr. Sullivan's statement of the underlying law upon which all good architectural design and all true architectural style is founded, it may be well to amend it and say: "Function and environment determine form," using the words environment and form in their broadest sense.

The functions served by the work of the architect have expanded but little, and have varied still less within the limits of the historic records of architecture, nor has there been much change until the last quarter of this century in those conditions of environment which comprise the structural and decorative materials at the disposal of the architect.

The great epochs in the development of architectural styles are respectively characterized by the introduction of the beam and lintel, the Roman arch and vault, and the pointed arch and its characteristic vaultings. It is our good fortune to have inherited all that was accomplished by the many generations who lived and thought and worked in those epochs. We are still more blessed in being allowed the privilege of participating in the creation and in witnessing the birth of another epoch of architectural design, the form or style of which will be founded upon the discovery of the steel pillar, the steel beam, the clear sheet of plate glass, electric light and mechanical ventilation, all devoted to the service of functions or wants created by the greater intensity of modern life, and by improved means of communication between places and men.

Probably there were those in Greece who deplored the departure from correct and historic Assyrian and Egyptian architecture which had to be made in order to originate and establish the most exquisitely finished and most fully and logically developed architectural style the world has known. And when the sturdy but gross-minded Roman used and modified Greek prototypes in accordance with his coarser and more aggressive mentality, and when finally he introduced the arch and the vault, and substituted for the refined and elegant treatment of the severe and regular forms inseparable from beam and lintel construction, a bold and comparatively unrefined treatment of the more irregular and picturesque forms made possible by the discovery of the arch, the new departure was certainly as displeasing and distressing to the purists and scholars of that day as were in later days the works of those alleged barbarians whose efforts to utilize to the utmost the means and knowledge at their command, created the styles known as Byzantine and Romanesque, and finally that culmination of protest against dry-as-dust tradition, the styles which scholars and men of culture derisively named after the barbarian Goths.

So also in our day many of those who have been taught to understand and love and honor forms and traditions transmitted from past ages, shrink from contact with the new materials and processes; and noting the inevitable modifications of time-honored theory and practice, lift their voices in protest against legitimizing forms which are the offspring of newly arisen functions, and of newly discovered conditions of environment.

And yet each historic style was called into being in obedience to new developments of function or environment, and each was in its day an iconoclastic innovation upon well established and firmly founded practice. Therefore we are justified in assuming that the new conditions will exert a marked influence on architectural style in our day and in the future.

It is the duty of those who, by familiarity with the historical styles are best fitted for this task, to ascertain the creative principles and laws which underlie the architectural style of bygone periods of greatest artistic achievement, and to apply these principles to the utilization of the means placed at the disposal of the architect of our day for satisfying the requirements of the day.

The American architect who travels in Europe and studies the architecture of the many ages which have preceded the last century, is impressed and charmed by the freedom and naïveté with which consciousness of the fact that each age is the heir of all preceding ages is proclaimed in the composition and in detail of so many structures. Nothing can be more interesting than the observation of the existence of a living, vigorous style, joyous in the consciousness of life, free to assimilate the old and to create the new. Nor is it unprofitable to follow a style from the exuberance of its youthful vigor to old age and decadence, to ossification and crystallization into an inert and lifeless set of fixed and unalterable rules, into a fetish to be worshiped by future generations—in other words, into an academic historic style.

But, after one has taken it all in, there is one impression stronger than all others. It is the consciousness of the zeal and earnestness of the all-pervading endeavor to utilize all the means at command that the form and expression of each structure might conform to its function, whether that were the worship of God, or the glorification of guild or municipality; whether intended to serve the lavish display of the wealth and dignity of the great

noble or to house the humble burgher, each kind of structure has its individuality, and of these again each gives expression to the character and personality of its occupant.

Our generation has in many ways shown itself worthy of its heirship of so many ages of material and scientific progress, and has given expression to its appreciation of its good fortune by transmitting to the future an inheritance still more valuable than that which has fallen to its lot.

What can the architect do that he also may prove himself worthy of opportunities so much greater than those enjoyed by his predecessors?

Human nature has limitations which circumscribe and define the attainable in literature and art. There will be none greater than Homer, than Moses, than David, than Shakespeare, than Phidias, than Leonardo da Vinci, than Raphael, than Michael Angelo; no author, no sculptor, no painter, no architect can as an artist expect to excel those who have gone before. But the architect is not only an artist, but also an engineer, a man of science and a man of affairs. In these latter capacities, the architect of today has at his command instrumentalities and opportunities unknown to his predecessors. Were he an artist only, the giant strides which science and, by its aid, industry, communication and traffic have made in the past fifty years would leave him by the wayside, content as are his fellow-artists of the brush and chisel to admire the onward rush—to be with it but not of it, to be dazed by its splendor and to thrive and wax fat under the patronage of those who initiate and control the movement of modern material progress.

But architecture is not permitted to remain placidly contemplative of the march of events. The architect is not allowed to wait until, seized by an irresistible impulse from within, he gives the world the fruit of his studies and musings. He is of the world as well as in it. The world of today has greater need of his aid than had any previous period, and he is pressed into its service and must work for it and with it, no matter whether or not urged by the spirit within him. The world must have buildings; it will have them adapted to its wants and functions; it will insist upon the utilization of the best of the materials and processes which scientific and industrial progress place at its disposal. The architect must, therefore, fit himself for the duties thrust upon him. The world calls upon him to do the work of today with the tools of today—not as a tyro, not as one who must first learn how, but as an architect, a master-worker, as one of whom the world believes that familiarity which he has acquired with the processes by which the work of other periods has been accomplished makes him better fitted for the work of today, and that he will press into its service all the experience of many ages and epochs.

Michael Angelo was painter, sculptor, architect, diplomat; but above all, and in all, an artist. An important factor in his greatness as an architect was his familiarity with the technique of the auxiliary and subsidiary arts, sciences and crafts, the command of which devolves upon the architect. The great Buonarrotti did not disdain to learn the metal founder's, the quarry worker's and other crafts in order to be the better able to carry out the plans which his great mind had conceived. Were he among us now, he would be in the front rank of the experts and specialists in all the modern arts and sciences which have arisen to perplex and worry the artist-architect wedded to the traditions, processes and materials of the past. And being master of specialties and details, he would, as general, muster them all into martial array for overcoming the difficulties incident to the expanded and diversified demands which our time makes upon the architect.

Few, perhaps none of us, can be equal to Buonarrotti, but all can emulate him in his zeal and capacity for hard work. We too can become impatient and contemptuous of the performance of auxiliaries and specialists, and dismissing them, can ourselves acquire a knowledge of the technique of their arts and sciences and crafts, and in the furnace heat of zeal and enthusiasm for the attainment of a great end, combine all that we honor in the lore and traditions of our profession with the discoveries and achievements of the science of today, pour all into the mold of contemporary requirements and bring forth our contribution to the architecture of the new world, the new age of steel, electricity and scientific progress.

For several years it has been the fashion among the professors of our art to decry the new materials and processes of construction and condemn their most noteworthy applications to the service of requirements born of modern conditions. The contributions which modern science has made to our power to command and utilize the materials and forces of nature, and the increased and expanded opportunities for the creation of useful and beautiful works which modern society has given us, have been looked upon askance. And it is greatly to be regretted that some of those whose works have proved them well qualified to determine under the new environments the forms best adapted to the old as well as the new functions, have been most persistent in their condemnatory utterances against the new problems which they themselves were so successfully solving.

What I have written is intended to be a protest against the dogma that art in architecture ended with the Renaissance, a denial of the assumption that the use of materials and processes and wants and functions unknown to the masters who flourished in that glorious period or to their predecessors in other eras of great artistic vigor in architecture is incompatible with the performance of truly artistic work.

I wish to maintain that the steel pillar and beam and other contemporary contributions to the materials and processes of



building construction; that the modern business building, and many other so-called monstrosities, are as legitimate contributions to architectural art as were in their day, when first introduced, the stone pier and lintel, the brick wall or pier, the arch, the vault, the roofed temple, the vaulted basilica, the spired and buttressed cathedral. All that is wanting is the will and the ability to make proper use of these newly discovered agencies.

The new materials and processes, the new requirements, should not, however, in their introduction into architecture and in their assimilation by our art be treated as things apart and by themselves, but as related to and part of all that has gone before in the long history of human and artistic progress.

The author of today has at his disposal and does not disdain to use an enlarged vocabulary; the musician has a greater range of instruments, a richer and fuller orchestration; and the great composer deems it a privilege to be able to evolve combinations of tone that were unattainable to his predecessors. And even if the painter of today uses the same pigments, and depicts the same phases of animate and inanimate nature, and the sculptor uses the same marble, and both painter and sculptor play upon the same gamut of human emotions as did their prototypes for many generations, that is no reason why the architect should look askance upon new instrumentalities and new opportunities for developing and enlarging the scope of his art.

Let us then welcome the prosaic output of furnace and mill, and even the unpromising and garish sheet of plate glass. If they are always used where they are wanted and as they are wanted, and never where they are not wanted nor as they are not wanted, we shall have taken the first step toward the transmutation of these utterances of scientific prose into the language of poetry and art. In the nature of things the block of rough stone, the lump of clay, the log of timber, all are apparently as unpromisingly unpoetic and inartistic as the much-dreaded and imprecated modern intruders into the programme of architectural composition, which are the title of this paper. What they have of poetic suggestion and significance they owe to the genius of man, and what man has done with them man can do with other media. Let us not stand back and admit that we are unable to learn from our predecessors how difficulties are overcome, how victory is wrested from apparent defeat.

Yet another word. I have quoted the dictum "Form follows function," and have modified it into the words "Function and environment determine form."

Steel pillars and steel beams occupy so little space that in order to inclose structures of which they are the essential supporting parts, they must be furnished with a filling if a space-inclosing structure is to be erected, and steel posts and beams to be adequately protected against possible attacks of fire must receive bulky fire-protective coverings. In these fillings and coverings we obtain media for artistic treatment which may be handled solely with reference to the desire to adapt "form" to "function."

From this I deduce that the influence of the new materials and processes will tend to a more free and less trammelled treatment of architectural design, and that the striving for the creation of ideally perfect form will be less hampered by limitations incident to the use of refractory materials of construction.

GEORGE F. NEWTON, BOSTON, MASSACHUSETTS.

Steel construction is without question the greatest innovation in architectural construction of modern times.

The principle involved in the use of steel is totally different from any before known in architecture. The economy in material and transportation and the saving in valuable space, as well as the rapidity with which this firm skeleton of steel can be carried skyward, permitting the various parts of the building to go forward at the same time, recommends it at once.

The result of this principle we cannot foresee. With the rapid progress in modern methods we may certainly predict for it a brilliant future. Its advantages are so evident and manifold that we cannot afford to condemn until every effort has been exhausted to adapt it to the various conditions which it may well serve.

Whether or no the high building is approved by all, it is with us—and an outgrowth of the need of our day. Interests which the architect cannot control will force this problem upon him for solution.

The subject is a timely one for the consideration of this society, and I trust will be advanced by these discussions.

The conditions which demand the employment of steel in the architecture of our cities certainly cannot in the future become less imperative. Will not the future rather demand larger and perhaps loftier schemes, and by the coöperation of capitalists and city authorities may not a safe and healthful plan be devised for these structures, solving the problem of sunshine and air and lead the way to brilliant achievements now unknown, at once logical, beautiful and monumental?

What forms the genius of the future will give to our churches, our libraries and other public buildings, with this supple material and its veneer of marble and terra cotta, we can scarcely imagine, as we are but yet on the threshold of its development.

Its beginning has awakened great activity in our cities and among our architects, and it must affect modern style in the future in a remarkable manner.

At this time, when so many are deprecating the high building, we should not lose sight of its benefits.

The adoption of steel construction has had a stirring influence upon architects of this country, leading them to unprecedented

activity. It has been the means of a reawakening in the art of architecture, a veritable renaissance which has revived a lagging interest—an incentive to greater achievements; and this influence has extended to the architecture of our land by instilling life and purpose into our art.

For its æsthetic effect in our nineteenth century streets the principle is not so much at fault as it would appear.

Our six-story buildings have dwarfed the edifices of the earlier part of the century until they have been swept away and others have risen in their places to the new height. Who can say what the twentieth century will produce? Certainly we shall not go backward; as our cities grow in size and wealth our buildings become more ambitious, and it is useless to decry this advancing movement—we must advance with it. We must make these buildings beautiful and monumental.

The question of light and air, if the generation is wise, will be taken up apace with advancing civilization.

When our streets were laid out for structures sixty feet in height, it was not then foreseen that edifices five times that height would make a cañon of the narrow thoroughfare. The streets answered well for the time for which they were designed.

No one probably would object to a high building because it is high, providing the streets were of sufficient width, or if occasional open spaces were arranged, or if the buildings should recede as they ascend above an established height.

The officials of a progressive city should seize opportunities to offset this remarkable development of the high building, not discouraging it, but adapting the streets to it. A parsimonious city government, blind to the future, will not accomplish what is evidently necessary.

It is particularly the duty of architects who can foresee the results to bring this matter before the public in some forcible and practical manner. Unless wise laws control the streets and buildings, unhealthy streets and deformities in architecture will result. What those laws should be can be suggested by no higher authority than this honorable body.

Our cities are undergoing a great transformation. What the effect may be in years to come will in a great measure depend upon the adjustment of this matter.

High buildings have been very severely criticised; many deservedly so. These have fallen into unappreciative hands unqualified by training to cope with the problem. Many architects build high buildings who do not believe in them—and is it strange that the building, always a sensitive subject, expresses this in its composition? It is not just to cite a badly designed building as an example of high buildings. If we mention a type of architecture, as for instance the French Gothic style, we think of Amiens or some other beautiful example typifying the perfect style. So we should select the most successful high building as a representative of its class, one which a sympathetic mind has carefully studied in every line until a masterpiece is produced. There have been some very beautiful steel buildings erected, as there have been many opportunities thrown away.

New methods of construction require new principles of design to a certain extent. We have been applying historic forms to our buildings of ordinary construction and it is perhaps æsthetically correct not to depart too widely from them in the steel structure.

But is it not to be supposed that with this totally different principle new forms requiring other proportions and other materials would be a possibility even desirable? Here is a skeleton formed of sinews and bones, if you please, skillfully adjusted, firmly knit and set on slender legs. It is no longer the principle of pyramidal stability, but a lofty rigid structure firmly imbedded in earth. Its skeleton frame is to be enriched with an architectural casing, not supported from the ground but clinging to its frame, adding grace, completeness and elegance; its windows ample below with supports not professing to hold its whole bulk nor disproportionately small; its species is known to the beholder and he is aware that the steel supports within are doing the work and there is no deception.

Would it not be possible to break away from precedent in certain cases and accomplish a successful building by treating its exterior as its structure suggests, assisted by the use of appropriate material for the superstructure? This would require the consummate artist, and unfortunately opportunity rarely seeks him out.

The study of the problem from this point of view by the trained architect earnestly endeavoring to create a beautiful architectural monument should have the most beneficial effect upon the development of modern style.

It has been remarked that this new principle has greatly increased the activity of architects. It is leading him into further fields of work. He is in some cases erecting his own buildings with architects' and construction offices adjoining. This practice, whether wise or not, is growing. The architect, who becomes the owner's agent, buys directly from the material dealers and employs the workmen, or when expedient lets out certain portions of the work to the sub-contractor.

The future of this practice is as uncertain as that of the steel building and perhaps of greater consequence to the profession of architecture.

Will the architect of the future design and build his own buildings? The client naturally approves, as the architect underbids the builder by five per cent. The architect assumes no financial risk and increases his commissions. It also gives him greater freedom for changes while the work is progressing.

Will the profession of architecture be benefited or injured by this practice? Will it make of architecture an art or a business?



The conditions in the days when the architect and the master builder were one, and when a lifetime was not considered too much to devote to a single mediæval building cannot be compared to our own time of haste and enterprise.

Will this modern practice lead to a condition harmful to the best interests of architecture? Why should not the builder resurrect his weather-beaten sign of "Architect and Builder." He can employ a designer to do the artistic, and his buildings would no doubt look as well as many of the creations of the regular practitioner.

It is courtesy on the part of the modern builder which deters him from invading the province of the architect? Is the latter better qualified to build than the builder is to design and superintend all the minutiae of a building?

This practice has grown out of the comparatively recent development in constructive methods, and the activity in steel construction is perhaps indirectly responsible for this outcome.

Steel construction has also brought about an organization of the builders' department. The master builder is a much more responsible person than ever before in the history of building. The various departments of complicated modern buildings are under capable charge, of which he is the head. This extensive organization is managed in the most systematic manner, so only the more serious difficulties need be referred to the master builder himself.

A building of ordinary construction did not require an extensive organization of the building trades. But the complicated steel structure has brought together many different interests, and the rapidity with which a building is erected requires good generalship.

The influence of plate glass was evident in our architecture before the steel building was invented, and occasionally we see buildings with apparently adequate supports skillfully treated where an expanse of plate glass is employed. Plate glass should assist the steel building, in which the supports need not be as large as where masonry is used, and the apparent load will thus be removed from the glass.

The effect of steel construction and plate glass on the development of modern style must depend largely upon the instinct and artistic training of the architect. The engineer is doing his part well; and the responsibility of a successful future for architecture remains with the architect who appreciates that architecture is a fine art, and who will give his best energies to produce in every problem which he undertakes the most logical and beautiful creation of which he is capable, and who assists in maintaining the dignity and purity of his profession.

ROBERT D. ANDREWS, BOSTON, MASS.

I must confess to a little doubt as to the intention of this inquiry. I shall, however, proceed upon the supposition that what is meant is to discover in how much and in what way the use of steel construction and plate glass has affected the forms of true masonry design? It is evident, I think, that unless the employment of these agencies has caused some modification in the design of buildings where they are *not* employed, that their influence terminates in their own development, in which case they must be regarded rather as *additions* to the resources of modern design than as modifying factors in it.

An illustration will make this clear. When the Gothic builders found a method of lightening their vaults by concentrating the weight in the ribs, and incidentally discovered the practical value of the pointed arch, a change in architectural style followed. The round arch soon disappeared even from walls unconnected with vaulting, and the new forms—introduced as engineering expedients—made their influence felt even in matters of pure decoration.

Now, what we have to consider is, whether the introduction of steel skeleton construction is going to produce a revolution in style at all comparable in its nature to the one just instanced?

I think not. My first reason for thinking so is the direct one that I see, as yet, no evidence of any change in masonry design which can, with justice, be attributed to the influence of steel-framed buildings. The second reason is the theoretical one, that the use of steel has introduced no new construction principle. The way in which steel does its work is in no essential respect different from the way in which wood does its work. No different principle is involved. Steel has greater strength than wood and it will not ignite, but that is practically the extent of the difference between them as structural elements. Each requires some sort of protection from moisture and from fire.

There is, however, one feature of steel-framed buildings—I mean always those in which all masonry is supported on the framing—that might at some time become an agent in modifying the design of pure masonry façades, although it has not yet done so. I refer to the envelope which covers the steel framing. I have never particularly admired the paneling treatment of parti-colored marbles given by Giotto to the Campanile at Florence, because its composition of lines fails to *accuse* the idea of the solid masonry behind. It is too purely decorative, suggesting wainscoting, and is akin to the false treatment of many Italian church façades of the frontispiece type. In a word, it is not *expressive* in its suggestion.

Now, the same reason which would lead one to condemn this veneer treatment for a good wall of masonry leads one to condemn a masonry treatment for what is really a veneer. The treatment that is wrong in the Campanile would be right in the steel-framed façade. This being so, it is possible that a time may come

when the beauty of such a treatment of the envelope of steel buildings will so possess our minds that its influence will be felt in the design of masonry buildings. This possibility, however, is too remote to be reckoned as a present influence upon modern style.

Nor do I think plate glass can be counted as such an influence. It should be considered, like steel construction, rather an addition to our resources of design than a factor modifying them. There is nothing in plate glass which compels our invariable use of it in large sheets, and so drives out before it the employment of mullions, muntins and leads. With steel construction we should have had the great shop windows we have today even if the casting of glass in plates had not been invented.

It must be conceded, however, that by reason of its mechanical perfection, its freedom from flaws, and its even polish, plate glass exerts what influence it has to procure for it a setting in harmony with these characteristics.

Architecture has always been swinging back and forth between two extremes which are marked respectively by indifference to mechanical finish, and by delight in it. Your brilliant painter amazes his Philistine client by his unconcern regarding the finish of his brushwork, the client sets smoothness of finish above the qualities the painter regards because he is not a craftsman, like the painter. The unevenness which the client finds a blemish may be to the painter the mark of his freest and truest touch. So there are certain types of architecture to which the individuality and the touch of the craftsman lend a large part of their charm, whose very virtues are based on the happy use of the accidental, and whose effect is the opposite of formalism. These are the picturesque types. On the other hand are the formal types, where the charm resides in the submission of all parts of the work to a central authority, and where the individual note in any part is a defect. The finish of all parts is strictly laid down, and deviation from the general order is felt to mar rather than to heighten the general effect.

It is to this class of architectural styles that plate glass is naturally allied by reason of having the same kind of virtues. It may be said, therefore, to be always silently exerting what influence it has in behalf of classical architecture. Yet I think this influence will not be considered great enough to modify our previous conclusion, that modern style has been unaffected by steel construction and plate glass.

#### PROCEEDINGS OF THE THIRTIETH CONVENTION OF THE AMERICAN INSTITUTE OF ARCHITECTS.

THE thirtieth annual convention of the American Institute of Architects was held at Nashville, Tennessee, in the rooms of the Engineering Association of the South on October 20, 21 and 22, 1896.

Preliminary to the convention a meeting of the board of directors was held on October 19.

##### MEETING OF BOARD OF DIRECTORS A. I. A.

A meeting of the Board of Directors of the American Institute of Architects was at the Maxwell House. President George B. Post, of New York, in the chair. There were present also Vice-President William C. Smith, Nashville; George A. Frederick, Baltimore; E. I. Nickerson, Providence; J. O'Rourke, Newark, N. J.; James W. McLaughlin, Cincinnati; W. S. Eames, St. Louis, and Secretary Alfred Stone, Providence.

The reports of the secretary and treasurer and communications from Chapters and members were read.

The directors then considered a draft of their report to the convention, which had been prepared by the secretary, and after additions and amendments it was adopted and the secretary was directed to present the same at the meeting to be held tomorrow.

The names of several prominent men were suggested as honorary and corresponding members, to be reported to the convention for election.

The letter ballot for new members was opened and Messrs. Frank E. Kidder, Denver, Colorado; J. Monroe Hewlett, New York; Frank H. Quinby, New York, and Theodore H. Abrahams, Charleston, South Carolina—all the persons voted for—were found to be elected Fellows of the American Institute of Architects.

The resignation of Mr. C. F. Wilcox, of Providence, was accepted.

Adjourned. Attest:

ALFRED STONE, Secretary.

##### FIRST DAY'S SESSION.

At 10:30 o'clock the convention was called to order by President George B. Post, of New York. W. C. Smith, of Nashville, introduced Hon. A. J. Caldwell, whom, he said, was present to deliver a word of welcome from Tennessee to the visitors. Mr. Caldwell spoke as follows:

Gentlemen,—I have been authorized to extend to you, members of an ancient and honorable profession, a welcome to our city. The master builder has had honor from the time he created the majestic grandeur of the temples of Karnak and Luxor; and far beyond the era of Sphinx and Pyramid his fame dates back till it is lost in the gloom that broods over the ruins of prehistoric cities. The architect has the good fortune to build his own monument. The Acropolis was crowned with the temple of Pallas Athenæ, but her statue is gone and her shrine deserted; still the Parthenon in ruins, torn by the tooth of time and "the successive



depredations of barbarians, Turks and Scotchmen," is a monument to Pericles, its founder, and Ictinus, its builder, and the fame of Phidias survives, long after the Phidian marbles have been trodden under barbaric feet. On Mount Moriah Solomon dedicated a temple to Jehovah and made a monument to himself and Hiram, the Tyrian, who set the keystone of the arch, which is to this day the object of mystic and fraternal homage in every land. St. Peter's altar is canopied by a dome, that lifts its mighty vault in the blue of the Italian heavens, to the eternal remembrance of Michael Angelo, "who hung the Pantheon in the air." St. Paul's looms up over parliament and palace of the great protestant city, to the glory of Christopher Wren, of whom it was said in the grand Episcopal Cathedral, "Si monumentum quæris, circumspice." Over our city, whose freedom we tender to you, looks down yon Capitol, where upon the Erechtheum is placed the choragic monument of Lysicrates, called "the Lantern of Demosthenes"; a monument to the artistic daring of William Strickland, and a mausoleum, in which he sleeps with the public-spirited Samuel D. Morgan, of honorable memory.

The Capitol at Washington, where white marble rears itself in classic façade and portico, and where the acanthus crowns Corinthian columns—over all which soars the dome, unknown to Greece—is the great statehouse of the American Democracy, and the congressional hall of sovereign States. It is the creation of the constructive genius of Thomas U. Walter, who was the pupil of our own Strickland, who guided the mind of his illustrious pupil, worthy of so grand a master. Hence Teunesseans, taught by their fathers to honor the great art of architecture, open the gates of their capital city to you and salute you with all the sincerity of historic friendship and profound respect.

At the conclusion of Mr. Caldwell's words of welcome, the president addressed the convention.

#### PRESIDENT'S ADDRESS.

In calling to order this the thirtieth convention of the American Institute of Architects, I am profoundly impressed by the phenomenal development of the art of architecture in our land, as shown by the history of the Institute itself.

In the year 1857 a few architects, some of them fortunately men of great force of character, brilliant ability and profound devotion to art, held a series of meetings in the city of New York and effected the first practical organization of this association.

The architects of the country were then few in number, almost all of foreign birth and education, and concentrated in three or four of our principal cities. They had a status in the community neither as men of business nor of science, far less as artists. It seems to have been the popular opinion that their sole claim to merit was what was supposed to be an intuitive perception of the beautiful, which was characterized as "taste," combined with a certain facility in drawing, and the sole necessary preparation for practice of their art the possession of a copy of "Vignola" and a few engravings of houses, parish churches and cathedrals. In fact, he appears to have been considered in America as a useless and expensive luxury.

How marvelous the change. Four hundred and sixty architects are now Fellows of the Institute. They are spread north and south, east and west throughout the land, and students and architects trained in the best schools of Europe and America, who have not yet reached the dignity of Fellows of the Institute, are numbered by the thousands.

Throughout the greater part of the country the architect is the accepted arbiter in all matters connected with the building art. He is recognized as the acute man of business without whose aid no structure, from the laborer's cottage to the palace of the merchant prince, from the wooden chapel to the stately cathedral, can be judiciously or economically constructed. He is respected as the man of science whose ingenuity and trained skill in construction is furnishing models for the imitation of the world. Last, slowly and grudgingly, has come his appreciation as an artist, and the recognition of architecture as the most enduring, exacting and comprehensive of the fine arts.

The influence on painting and sculpture has been great. I may state without fear of contradiction that not only does the architect furnish to the painter and sculptor now, as always, his noblest opportunities (and the benefit is mutual, for without the aid of the painter and sculptor no complete work of architecture is possible), but that hardly a movement for the advancement of art in any of its branches is successfully made throughout the land in which the architects of this Institute are not the moving spirits. Thus in little more than one generation a glorious art has been born in the land and has reached a vigorous manhood. Never before in the history of the world has there been the opportunity offered by our times, and in this great and growing country, for the rapid and successful development of architectural art.

Our profession, imbued with the vigorous enthusiasm of youth in art—less trammelled than in older countries by the exacting control of long-established conventional methods of design, but fully appreciating the absolute necessity of a thorough training in such conventional methods; stimulated by the demands of a people as liberal in their expenditures as they are practical in their requirements; the successes and failures of the past and present clearly indicated by a cheap, voluminous and comprehensive literature; the methods and teachings of the great foreign schools constantly before us for guidance and instruction, the schools themselves open to our students; the examples of the old world brought daily nearer by increased facilities for economic travel; a thorough knowledge of its art treasures within the reach

of all through the inexpensive photograph; encouraged by the achievements of the past, are we not justified in the hope that the next generation will see American architecture advance toward perfection with strides unprecedented in the history of art?

A phenomenally rapid growth must be always fraught with danger, and this Institute should remember that as the guardian of our art it is under grave responsibility. By precept and example its members should ever guide the student; should heartily support our schools, which are numerous and excellent, and should demand that without undue sacrifice of practical instruction they should be, first and foremost, artistic in their teaching. They should be insistent in their assertion of professional dignity, should direct and control each forward movement, and if anything should seem to menace the healthy development of our art they should be prompt to sound a note of warning. They should never forget that the principles of their art are as controlling and immutable as the law of gravitation; that that which was great in design and construction in the days of the Ptolemies or Cæsars, at the time of the mediæval cathedral or of the Renaissance, now is, and always will be, great, and that it is not great because it was designed in exact conformity with current fashion or professional dogma, but because it conformed to the inherent principles of art.

In the facility for construction offered by modern engineering and cheap steel I see a most formidable menace to the rapid and healthy progress of American architecture. Let us ever remember that no body can be beautiful if its skeleton be ill-proportioned; that to achieve artistic success the exterior and interior, both in motif and design, must conform to and be the result of the exigencies of the plans. No sham can stand the crucial test, the criticism of coming ages. It has been the proud boast of the architect that his work formed the most imperishable record of the civilization and art of his age and generation. Let us so build that our important works will stand for ages. Steel should be our most profitable and efficient servant if legitimately used to secure stability and strength, but if used as a means of deceptive construction all art in the work must die, for the fundamental principle of art is truth.

In this connection the paper to be read before us, upon "The Influence of Steel and Plate Glass in the Development of a Style of Architecture," will be heard with interest, and incidentally I believe that the hearing of papers and the discussions which they elicit may with profit in the future occupy relatively a larger part of the time of the Institute when in convention, and that debates on the Constitution and By-Laws may be made more brief.

I am happy to be able to state that the persistent and reasonable demand of the profession, that the buildings hereafter to be erected by the Federal Government should be at least as good in design and as economic in construction as the work done by the architects in private practice for States, corporations and individuals, is likely to receive its reward in the near future in the passage of a measure which will result in proper competition for such work, rather than requiring, as now, that the designs should be made in the Treasury Department under conditions which render good, artistic and economic work a physical impossibility. The report of the Committee on the United States Federal Buildings is of the utmost importance.

My predecessor in office last year directed your attention to the need of a permanent home for the Institute. The matter is one seriously affecting our possibilities for exerting the most useful influence. The subject of this report is worthy of most careful and mature consideration.

During the past year we have been called upon to mourn the loss of five Fellows: Joseph Lederle, of New York; A. M. Cotton and W. J. Edbrooke, of Chicago; A. B. Cutting, of Worcester; A. Page Brown, of San Francisco; and three honorary members—the Rev. W. H. Furness, of Philadelphia; Martin Brimmer, of Boston, and the Chevalier J. Da Silva, of Portugal; also one corresponding member—F. Browne Goode, of the Smithsonian Institution.

By the Order of Proceedings of the Convention the address of the president forms the first subject of debate. He has preferred to make but slight reference to matters of its material interests, knowing that they would be fully and ably treated in the reports of your officers and of standing committees. He has preferred rather to tax your patience by a review of the state of the art of architecture in America, and its present possibilities of development, and to ask, in view of their achievements in the past and the promise of the future, if the architects of this Institute are not justified in the hope that, if true to themselves and true to their art, the time may come when the world may look to this country for its great examples of modern architecture, when the American School of Art will be the first and greatest in the world?

The report of the Board of Directors being next in order, was read by Secretary Alfred Stone, of Providence, Rhode Island.

#### REPORT OF BOARD OF DIRECTORS.

Notwithstanding the depressed condition of business in the country, the affairs of the Institute have enlisted the uniform and sustained interest of the Fellows, and the correspondence of the secretary with the Fellows of the Institute has never been greater than during the past year.

The membership has increased by the election of Leopold Eidlitz, of New York, and George Keller, of Hartford, by the Board of Directors in accordance with the power given it by an amendment to the By-Laws passed at the St. Louis convention, and by the election by letter ballot of fifteen Fellows.

Mr. Dankmar Adler's return to the practice of his profession has also restored him to full fellowship with the Institute, making a total addition of eighteen Fellows.

The loss by death has been five, and by dropping from the rolls thirty-three, leaving a total membership of 461 Fellows. The statement of the loss



by dropping from the list of Fellows of the Institute thirty-three names would be misleading if it was not explained that some have been carried on the rolls for a long time with the hope that many, if not most of them, might find themselves able to continue with the Institute; some have given up the practice of architecture, and some have moved from their former residences to places unknown to the officers of the Institute, making it necessary for the Board of Directors to formally recognize the existing condition and vote to drop the names from the rolls.

The death of Mr. Joseph Lederle, of New York, occurred on March 21, 1895, but was not known to the secretary until too late to report to the St. Louis convention.

The death of A. M. F. Colton, of Chicago, occurred March 13, 1896, at the age of seventy-one.

Mr. A. F. Cutting, of Worcester, Massachusetts, a former member of the Western Association, died February 6, 1896, in Los Angeles, California, where he had gone in search of renewed health.

Mr. A. Page Brown died at San Francisco, January 21, 1896, as the result of an accident which happened to him several months before. Although among the younger men of the profession, he left behind him many evidences of his professional skill and taste, especially in works produced in the characteristic style of the Spanish architecture, which had grown up in the Spanish and Mexican colonies on the Pacific Coast.

W. J. Edbrooke died in Chicago, March 25, 1896. He was Supervising Architect of the United States Treasury Department during the administration of President Harrison, and won many friends during his residence in Washington.

Of the deceased honorary members, Rev. W. H. Furness, D.D., the distinguished Unitarian divine of Philadelphia, where he had resided during the whole of a long and most memorable pastorate, was a lover of the fine arts and of architecture, and those who attended the annual convention held in Philadelphia in 1871 will remember with pleasure the address he delivered before the convention on that occasion. He was the father of Mr. Frank Furness, the well-known and distinguished architect of Philadelphia.

Mr. Martin Brimmer, of Boston, was a discriminating patron of art and liberal contributor of both money and time to its promotion, and also an author of recognized ability and broad culture. His writings upon Egypt have been recognized as authority on this subject, and are noted for beauty of diction and graphic description.

Chevalier Da Silva, court architect of Portugal, for nearly thirty years an honorary member of the Institute, died on March 24, 1896, at the age of eighty-nine, full of years and honors, distinguished at home and abroad as an architect and archaeologist.

Of the corresponding members, the Institute loses Prof. F. Browne Goode, the well-known assistant secretary of the Smithsonian Institution and curator of the National Museum, who brought out of a chaos of inaccessible treasures the orderly, well-arranged, enjoyable and instructive collection which makes the Smithsonian Institution take rank with the finest museums in the world.

Your directors have considered the various questions which have been brought to their attention, and have endeavored to promote the best good of the Institute and to assist in every movement to elevate the tone of the profession.

The question of establishing permanent headquarters for the Institute was referred to a committee which will present a partial report to this convention for your consideration.

The committee appointed to consider the questions in connection with designing buildings for the United States Government will also present a report of its doings which will show that much progress has been made, and with the hearty coöperation of Mr. William Martin Aiken, a Fellow of the Institute and the present incumbent of the office of Supervising Architect, it is confidently expected that the movement will result in legislation tending to place the whole matter on a more satisfactory basis than it has been since the creation of the office.

The publication of Professor Johnson's papers on "Timber Tests and Flitched Beams" has been received with much interest, and your secretary has had requests for the same and for the reports of the tests of the United States Government from the most distant quarters, the latest being from South Africa, where the subject engaged the attention of a meeting of the South Africa Architectural and Engineering Association, Mr. Johnson's and Mr. Bullard's papers giving occasion for the discussion, and forming the basis of the evening's debate.

The proposed destruction of the Bulfinch portion of the Massachusetts Statehouse did not formally come before the board for consideration, but the officers of the Institute as individuals gave expression to their opposition to the proposal, and it is believed not without effect—at any rate, the destruction of the building has been, it is hoped, permanently averted.

The want of uniformity in the rules for installing electrical work has been a fertile field of discussion and censure in the architectural profession, and the president readily embraced the opportunity offered to send your secretary as a delegate to a conference held in New York last spring, on "Standard Electric Rules," and the Board of Directors voted that the treasurer of the Institute should pay \$25 toward the expenses of printing, etc. Your secretary was appointed a member of a committee of the conference, for the proper formulating of rules to be submitted to the conference. This sub-committee met in New York on Friday and Saturday of last week and made good progress, will hold another meeting in November, and hope to report the result of their deliberations to the conference in December. There is little doubt that as a result of the conference more uniform and consistent rules will be adopted and promulgated, and the Institute will probably be asked to indorse and recommend them.

It is therefore desired that the Institute consider at this meeting whether it wishes to give the Board of Directors authority so to do, in case the rules meet with their approbation, and that the indorsement asked for properly comes within the province of the Institute.

The question of licensing architects has not been as actively agitated the past year as it was the year before, and from the criticisms which have been made upon the passage of laws which compel the examination of architects and licensing such as prove competent, it would seem to be worth while for the Institute to consider whether it had not better itself institute a system of examinations before admitting members to the Institute, as is done in the case of the Royal Institute of British Architects and of the Manchester Society of Architects.

It is evident that the present relation of the Chapters to the Institute is not as close as it was when all the professional members of all the Chapters were members of the Institute, either as Fellows, when raised to that position by election, or as Associates by virtue of their Chapter membership. Not a few of the older Fellows question whether the Institute did not make a mistake in giving up the title and class of members formerly designated "Associate Members," and thus retain that relation between Chapters and Institute which has been justly considered essential for the best interests of both. If we were to go back to the old method, it is believed that new Chapters would be formed, the membership of the Institute would at once be increased, and its influence widely extended.

The work of local Chapters has been in many cases very effective in assisting in the construction of building laws, and urging and aiding their passage, in advising and educating municipal governments, committees and individuals as to the conduct of competitions; in promoting and advising municipal improvements; in inaugurating and conducting or assisting in public architectural exhibitions, and in many other ways making themselves helpful factors in modern life.

The Royal Institute of British Architects has, like the American Institute of Architects, lately adopted a form of Uniform Contract, which, as in the case with that adopted by the Institute, has been subject to a good deal of adverse criticism, but, notwithstanding, has been largely adopted and used. There will be many architects who will not use any form of contract except one of their own, and many architects prefer to have their clients employ counsel to draw up the contracts, especially when they involve the expenditure of hundreds of thousands of dollars; but it seems not only reasonable but of great advantage in ordinary contracts involving an expenditure of not more than \$50,000 that the Uniform Contract should be used, for by such use it comes to

obtain a force which is of great value; and the interest of both owner and contractor are established on a just basis; and its provisions for arbitration do much to prevent expensive litigation and avert the danger of unfair treatment of the contractor by owner or architect, and gives both owner and architect ample opportunity to compel a contractor to faithfully fulfill his contract. It is therefore hoped that the continued use of the Uniform Contract will increase, and that persons wishing changes made therein would send the same to the secretary for consideration.

The attempt to alter the Constitution by reducing the number of members of the Board of Directors, and by permitting a change in the same upon an affirmative vote of two-thirds of the ballots cast instead of two-thirds of all the Fellows of the Institute, was defeated, because less than two-thirds of the Fellows voted for the changes proposed, 277 voting in the affirmative to 30 in the negative on the first proposition, and 306 voting in the affirmative and 22 in the negative on the second, showing a preference not to concentrate the power to rule in the hands of a small governing board.

Mr. Daniel C. French has been commissioned to erect a memorial to the late Richard M. Hunt, a former president of the Institute, on the wall on the Fifth Avenue side of Central Park, at one of the entrances near the Metropolitan Museum. The directors would suggest that the Institute testify to its love and respect to the memory of Mr. Hunt by a subscription of \$1 from each and every Fellow.

It is the purpose of the Board to issue the Proceedings of this Convention by the end of the official year, and the secretary has been instructed to print in it a chronological list of all the members of the Institute from its beginning, and to print by themselves the names of the "Founders of the Institute," and thus perpetuate the memory of those who, impelled by a love of architecture as a fine art, established it in order to elevate the practice of architecture and to encourage a standard of professional and ethical conduct.

Since the foundation of the Institute, the number of persons who have entered the profession has increased in a ratio far beyond the increase of the population of the country, and a corresponding demand for the services of architects has grown with the growth of practitioners; but the hustle and strife to secure clients has not grown less, but has increased, and the resort to unprofessional methods, which a fine instinct rebels against, has become so much a matter of course that a hesitation to enter the scramble is supposed to indicate a want of energy and enterprise by those whose professional services are set up for sale—as the manufacturer sets up his goods to be drummed for and "promoted." It is essentially the duty of the Institute to foster and maintain in the practice of its Fellows the highest standards, and to discourage everything tending to lower it, and also to encourage the growth of an instinct which is too sensitive to be defined by a code of ethics, and which settles all questions by asking how it would seem if the proposed action toward another was the acting of the other toward himself.

Treasurer S. A. Treat, of Chicago, read his report, and the chair appointed an auditing committee, consisting of Messrs. L. G. Halberg, George A. Frederick and W. S. Fames, which at a subsequent session reported the treasurer's statement to be correct.

The following names were enrolled upon the register of the convention: George B. Post, of New York; William C. Smith, of Nashville; George A. Frederick, of Baltimore; Edward I. Nickerson, of Providence, R. I.; Jeremiah O'Rourke, of Newark, N. J.; James W. McLaughlin, of Cincinnati; William S. Fames, of St. Louis; Alfred Stone, of Providence, R. I.; James B. Cook, of Memphis, Tenn.; W. G. Preston, of Boston; George Keister, of New York; L. G. Halberg, of Chicago; John M. Allston, of Pittsburg; Gustav W. Drach, of Cincinnati; John M. Carrere, of New York; George H. Helmle, of Springfield, Ill.; Thomas H. Morgan, of Atlanta, Ga.; George B. Ferry, of Milwaukee; J. S. Rogers, of Detroit; J. H. Meier, of Detroit; Robert Craik McLean, editor INLAND ARCHITECT, of Chicago; Samuel A. Treat, of Chicago; Levi T. Scofield, of Cleveland; E. J. Eckel, of St. Joseph, Mo.; D. T. Kennard, of Chicago; Theo. Carl Link, of St. Louis; George W. Thompson, of Nashville; William Martin Aiken, of Washington, D. C.; Robert Stark, of Nashville; Herman Gaebler, of Nashville; Henry Gibel, of Nashville; George W. Rapp, of Cincinnati; John H. Ball, of Cincinnati; J. W. Yost, of Columbus, Ohio; J. H. Pierce, of Elmira, N. Y.

The secretary read an abstract of the reports from Chapters, after which reports from standing committees being in order, that on Foreign Correspondence, W. L. B. Jenney, chairman, was read by the secretary as follows:

Your Committee on Foreign Correspondence begs leave to submit the following report:

A letter dated November 11, 1895, from the Société Académique D'Architecture de Lyons, France, was duly received, informing the American Institute of Architects that said society has placed the American Institute of Architects among the foreign societies with whom they are in correspondence. The letter was duly acknowledged.

By circular letter dated April 4, 1896, from the Société Centrale des Architectes Français, the American Institute of Architects was notified that since the convention at Berne, in 1886, creating the International Union for the protection of literary and artistic works, the Centrale Société of French Architects had succeeded in placing with said International Union architecture on an equal footing with painting and sculpture; still they would respectfully request that the American Institute of Architects should see that the American delegates to the said International Union should not oppose the efforts of the Centrale Société of Architects of France in this respect, but, on the contrary, do all in their power to contribute to the success of their efforts that architecture may permanently occupy with said Union a position among the fine arts on the same footing as painting and sculpture.

Your committee has been unable to obtain the names of any of the proposed delegates to the said International Union, and in this respect would ask assistance of any member of the Institute.

Your committee was pained to learn of the loss to the profession at Lisbon, on March 24 last, of one of its most distinguished members, Monsieur Joaquim Possedonic Narcizo da Silva. An appropriate response was sent to his eldest son, M. Ernesto da Silva, at Lisbon.

Respectfully submitted,  
W. L. B. JENNEY, Chairman.

The following is the report of the Committee on Education, Henry Van Brunt, of Kansas City, chairman. Read by the secretary:

#### REPORT OF THE COMMITTEE ON EDUCATION.

At the twenty-eighth convention of the Institute, held in 1894, this committee in its annual report ventured the proposition, whether the methods of instruction in our schools, especially the study of the historical styles, might not be so directed as ultimately to lead to a higher comprehension of our professional responsibilities in relation to the development of a system of architectural forms which should be more accurately adjusted to the expression of modern American civilization than those which at present prevail; whether, in short, we should continue to allow ourselves to drift toward some unknown result, or endeavor to control the current, keeping it within reasonable bounds.

In accordance with the request of the Institute, the committee, with the above object in view, opened a correspondence with the directors of the



schools, partly to show our general interest in their work, but more especially to ascertain to what extent and in what way a knowledge of the spirit underlying the development of the historical styles was inculcated. Some of the replies received were printed with the committee's report of last year. They conveyed to the Institute on the whole an agreeable impression of the intelligence and thoroughness with which this branch of architectural study was pursued in the schools.

But the committee, in its report of last year, after reciting these facts, ventured to suggest what might prove a practical method of bringing about the results aimed at in the report of the previous year. They proposed to refer to the post graduates of the schools, now become active practitioners in the profession, and to the members of the Institute in general, in the consideration of these larger subjects, which the limitations of the schools prevent them from properly treating.

With this in view, the committee has been encouraged to propose for open discussion in the present convention, a subject which seemed to them of sufficient interest to awaken active discussion, and of sufficient importance to call into play the best intelligence of the profession. Several members of the Institute have been good enough, at the request of the committee, to prepare essays on the theme chosen, namely: "The Influence of Steel Construction and of Plate Glass on the Development of Modern Style." These essays will be read at this convention, in order to open the way for a discussion which, it is the hope of the committee, may become general, the subject having been duly published to the members of the Institute to this end.

If this discussion should prove to be a distinctive and satisfactory feature of the present convention, it is hoped that it may form an inspiring precedent for those which are to follow, and that thus the proceedings of future conventions may have at least one element of permanent value to the cause of good architecture, and one which, in attracting the attention of the thoughtful men outside of our profession, may cause our work and our aims to be regarded with increased respect and a more intelligent sympathy.

HENRY VAN BRUNT, *Chairman.*

The Secretary read the following report of the Committee on Building Laws, Theodore M. Clark, of Boston, chairman:

#### REPORT OF THE COMMITTEE ON BUILDING LAWS.

Your committee has no service to the public to report this year. Although it has reason to suppose its counsel would have been valuable in several instances, where new codes of building regulations were under consideration, it received no request for its advice, and did not consider it desirable to intrude its services without invitation. At the same time your committee believes that if suitable means could be taken to inform the public of the fact that the Institute maintains a standing committee for the purpose of furnishing, gratuitously, to communities or persons who are considering matters of building legislation, such information and suggestions as the principal professional body of the country can supply, and some evidence should be given of the qualifications of this committee to advise in such matters, its services would be sought not only by communities desiring to avail themselves of its special knowledge, but by legislative committees, which, by referring technical questions to such an authority, could avoid the importunities of selfish interests, which are too often able to pervert building legislation for their own profit. As more rational and uniform building laws would considerably lighten the labor and anxiety of architects, your committee suggests that the Institute might with advantage undertake the preparation of a tract on building laws, comparing the practice of different localities and different countries, and endeavoring to make it comprehensive and useful to the general public. The library of the Institute already contains the most important work on the subject ever issued, the *Manuel des Lois du Batiment*, of the Société Centrale of France, and it would be a matter of small expense to collect the building codes of all the principal cities in the world, most of which could be obtained gratuitously by the Institute. With this material, your present committee, or such other committee as the convention might appoint, should be able to prepare a treatise of permanent value, which might first be published as a part of the convention proceedings and separately printed in pamphlet form as a tract for distribution. On application from a Fellow of the Institute, copies of this tract might properly be sent to city officials, or members of legislative committees, and could hardly fail to be of benefit. It seems to your committee that in some such way as this the Institute cannot only perform, without intrusion, a public service which it is better qualified to render than any other part of the community, but may, in a dignified manner, call attention to its position at the head of the building interests in America. After the committee in charge of this tract had finished its work the documents which had served in its preparation should be kept together, as a record of the condition of the art of building throughout the world at the close of the nineteenth century. This record would grow every year more valuable, and your committee hopes that the time may not be long until the Institute is established in permanent quarters, where such records may be consulted and continued, and from which its publications of general interest may be issued.

THEODORE M. CLARK, *Chairman.*

The report of the Committee on Publication and Library, Frank Miles Day, chairman, urged the question of permanent quarters for the Institute. No report was received from the Committee on the Conservation of Public Buildings, R. M. Upjohn, chairman.

The following letter from Robert D. Andrews, of Boston, was read by the secretary:

October 8, 1896.

Alfred Stone, Esq., Secretary A. I. A., 75 Westminster street, Providence, R. I.:  
DEAR SIR,—May I ask you to bring the following resolution before the Annual Convention of the Institute?

"Resolved, That the Committee on Publication and Library (or such other committee as the convention may choose) shall be empowered and requested to make a collection of the building laws of the more important foreign cities, and shall translate and publish, as an Institute document, such portions of these building laws as relate to the external aspects of cities and such other portions as may be considered of value to the profession."

I think the idea of this resolution is obvious. All our cities are struggling with building laws, having in view the beauty of the city and the just enjoyment of the privileges of light and air. I believe that a very valuable book might be produced upon this subject, and that it might result in materially simplifying the problems with which every city in the country has to deal.

Any amendment looking toward the perfecting of the general idea above expressed will be gladly accepted by me. Very truly yours,

ROBERT D. ANDREWS.

The resolution contained in Mr. Andrews' letter was subsequently reported on favorably with an amendment by the Committee on Board of Directors' Report.

The Chair appointed John M. Carrere, George B. Ferry and A. W. G. Preston, committee to consider President's Address and reports of directors and standing committees.

The report of the special committee on Government Architecture, George B. Post, chairman, was read by Mr. Carrere, its secretary, as follows:

#### REPORT OF LEGISLATIVE COMMITTEE ON GOVERNMENT ARCHITECTURE.

The Legislative Committee on Government Architecture, appointed by the American Institute of Architects, respectfully reports to this convention as follows:

The only legislation which this committee has had in charge refers entirely to a bill "to provide for the securing of plans and for the erection of public

buildings of the United States," introduced in the Fifty-third Congress by Mr. McKaig—Congressman from Maryland—and commonly known as the "McKaig Bill," and reintroduced in the Fifty-fourth Congress by Mr. Aldrich of Illinois—now designated as House of Representative's Bill No. 1,470, and Senate Bill No. 2,677.

The purpose of this bill—which is defined in its title—is to radically change the present method of procuring designs for public buildings. It establishes a commission, whose duty it shall be to procure these designs in competition among members of the profession in private practice, and to appoint, by means of such competitions, an architect for each building—the supervising architect becoming then the representative of the Government. The relation which the bill establishes between the architect of the building and the Government is really the same as that usually existing between the architect and the client in private practice—the Supervising Architect, as stated before, becoming the Government's representative.

Most of the members of the Institute are familiar with the history of this bill, but it seems opportune to give a short sketch of this history at the present time, so that the members of the Institute may be fully posted as to all details in furthering the interests of the bill in the approaching session of the Fifty-fourth Congress.

After Mr. Burnham's correspondence with Secretary Carlisle, all negotiations between the Institute and the Secretary of the Treasury ceased. New negotiations were started at a dinner given by Mr. Bruce Price at the Union Club, on May 25, 1894, to Assistant-Secretary Curtis and a number of well-known architects, and at Mr. Curtis' suggestion the original draft of the "McKaig Bill" was prepared by Mr. George B. Post, and after being revised several times by Secretary Carlisle and by the architects, until found satisfactory, the bill was introduced in the Fifty-third Congress in the House and in the Senate.

The architects were given a hearing by the House, and the following gentlemen were present at this hearing: Mr. Richard M. Hunt, Mr. Edward H. Kendall, Mr. Charles F. McKim, Mr. Daniel H. Burnham, Mr. Robert S. Peabody, Mr. Edward M. Wheelwright, Mr. Bruce Price, Mr. Arthur Rotch, Mr. John DuFais, Mr. Warren R. Briggs, Mr. George L. Heins and Mr. John M. Carrere.

The House Committee was addressed by Mr. Hunt in a most impressive manner, and at its request Mr. Hunt appointed a special committee, consisting of Mr. Bruce Price, chairman; Mr. John M. Carrere, secretary, and Mr. Edward H. Kendall, to have charge of this matter. At the request of this special committee, Mr. Richard M. Hunt, Mr. Charles F. McKim and Mr. George B. Post agreed to serve as an advisory committee.

After a very persistent campaign conducted by the special committee the bill failed to pass, owing to the opposition, for political reasons, of Mr. Bankhead, then Chairman of the Committee on Public Buildings and Grounds of the House.

The history of the bill during this period has been published and commented upon so frequently and so fully, that the profession are familiar with all its details, and though the bill failed to pass it was not owing to a lack of interest on the part of the public or of the profession. A great amount of actual work was done by the committee in charge, and by a large number of architects all over the country—also by their friends and by the press.

Many visits were made to Washington by all those interested in the bill, at considerable expense and sacrifice. The bill was very extensively advertised, and became well known and well understood by the profession, by the press and by the public throughout the country, and it had practically unanimous support, excepting from a few politicians.

A new committee was appointed by the American Institute of Architects, to have charge of this work in the Fifty-fourth Congress, composed of Mr. George B. Post, chairman; Mr. John M. Carrere, secretary; Mr. Bruce Price, Mr. Alfred Stone, Mr. Robert Stead and Mr. James G. Hill.

By the efforts of the committee this bill was introduced in the Fifty-fourth Congress by Mr. Aldrich, of Illinois, on December 12, 1895. It was favorably reported upon March 30, 1896, by the House Committee, and was before the House for passage as soon as a day could be set for its consideration. The bill was introduced in the Senate by Senator Quay, of Pennsylvania. No report has been made by the Senate Committee.

During the first session of the Fifty-fourth Congress no effort was spared to obtain a day for the consideration of the bill by the House, and its passage, but owing to the political complications resulting from the canvass for the presidential nomination and the general blocking of business, it was impossible to obtain a day for the consideration of this bill or of any other bill excepting a few political bills and the regular government appropriation bills.

The coming session of Congress is the second half of the Fifty-fourth Congress, and all bills introduced in the first half still remain on the calendar. Our bill is in exactly the same position now as it was at the close of the first session of the Fifty-fourth Congress, namely, it is ready for passage by the House as soon as a day can be set for its consideration; ready for a report from the Senate, and if reported upon favorably, ready for passage as soon as a day can be obtained for its consideration by that body.

You are probably aware that a bill can be passed first by either branch of Congress, and that it is then sent to the other branch. It is advantageous, of course, to have it introduced and reported upon in both houses simultaneously, which is what we have done.

The membership of the present Senate has not materially changed; the composition of the committee is entirely changed, the Republicans being in the majority, and the outlook being much more favorable for our bill if Mr. Quay, the chairman of the committee, can be persuaded to take an active and personal interest in it. Mr. Lodge, of Massachusetts; Mr. Aldrich, of Rhode Island, and Mr. Cullom, of Illinois, are our best friends, and the most interested, among the senators, in the bill.

The House has changed considerably, being now largely Republican, and the present members of the House are not as well acquainted with our bill and its merits as during the preceding Congress. Every effort should, therefore, be made to agitate the question again, through the press and by a personal appeal to the congressmen and senators, and every effort should be made to obtain a day in the House and in the Senate, to pass the bill.

During the Fifty-third Congress the committee found the demand upon their time so great that it was decided, as already stated in a circular issued to architects, to employ a regular attorney to attend to the matter, and to pay him for his services. The responses to the call for subscriptions have been very small, hardly sufficient to pay the traveling and other expenses of the attorney.

The committee, without claiming any special credit, feel that they have worked very hard for the passage of this bill. They feel that they are entitled to the full support of the profession, and it would be very unfair to them, to the bill, and to the great interest which has been displayed on all sides, in its behalf, if this interest should be allowed to subside, which seems to be the present tendency.

The committee, through you, wish to request the profession to use every endeavor to influence senators, congressmen, the press, and private individuals generally, in favor of the bill. It is necessary that the matter should be called to their attention repeatedly, and that it should be kept before the public constantly.

The committee also request that means be provided to raise the necessary funds already asked for in the circular, to defray the expenses of this work, and they request, in every possible way, support of the profession.

The bill has never had a better chance of becoming a law. There is absolutely no opposition to it in the Treasury Department. The Supervising Architect, though unable to take any action in the matter, is in sympathy with the purposes of the bill, and our chances with a Republican Congress are decidedly better, and in every way more favorable for the passage of the bill, than with the last Democratic Congress.

The committee also wishes to submit a financial report as follows.\*

Respectfully submitted,  
JOHN M. CARRERE, *Secretary.*

\*[The committee submitted a financial report which showed contributions amounting to \$1,195.65, with an expenditure to the same amount, from January 18, 1895, to February 1, 1896 during the term of the Fifty-third Congress. During that of the Fifty-fourth Congress, \$675 was contributed, and a balance of \$96 still remains in the hands of the committee.]



The report was discussed by George B. Post, John M. Carrere, Jeremiah O'Rourke, George B. Ferry and others.

Mr. Carrere stated that the report embraced the work of two committees, one appointed by the profession at large, and one representing the Institute, and Mr. Post sketched the history of the movement. Mr. O'Rourke spoke of the need of diplomacy in dealing with officials at Washington, and attributed the failure of the McKaig bill to the wording of the report upon it, and recommended that the architectural office be constituted a bureau. Messrs. Carrere, Fames and Nickerson were appointed a committee to draw up a circular to be distributed, as recommended in the report.

The Legislative Committee on Government Architecture was continued.

The convention here adjourned to 2:30 P.M.

Beginning the afternoon session a telegram was read from D. H. Burnham, chairman of the committee upon a national building for the Institute, stating that the committee had nothing definite to report. The committee was continued.

The report of the committee on the Patton and Cook papers read at the last convention, W. W. Clay, chairman, was read by the secretary. Appended to this was a letter from the Illinois Chapter outlining some proposed agreements with contractors. This so puzzled Mr. Cook that he asked for the report, saying that if this was the report the committee had sent a well-written piece of folly, but had not fulfilled its duty. The report was accepted and the committee discharged.

President Post made some remarks regarding professional charges, stating that it was his custom to compute the cost of the office work, and double that as his charge, which brought from five to seven per cent for ordinary work.

Article I, Section 6 of the By-Laws, was amended and incorporated in Section 3 of Article I, as follows:

Any person who has been a member of the American Institute of Architects, in good standing, for ten years, upon attaining the age of seventy, shall be exempt from the payment of dues and shall retain all the privileges of the Institute, including that of voting; and the board of directors may extend the same privilege to Fellows who have been in good standing for ten years and who have been compelled to retire from the active practice of architecture by reason of physical disability, provided they do not engage in any other profession or business.

The following were elected honorary members of the Institute: Gen. Francis A. Walker, Boston, President Massachusetts Institute of Technology; Sir Francis C. Penrose, F. R. S., London, England, President Royal Institute British Architects; Alfred Waterhouse, R. A., LL. D., London, England, ex-president of the R. I. B. A.

The following were elected corresponding members of the Institute: Tatsuzo Sone, architect, Tokio, Japan; Dr. William Dorpfeld, F. S. A., Athens, German Archaeological Institute; Edward Robinson, Boston, Massachusetts, Curator of Museum of Fine Arts; Daniel C. French, sculptor, New York; Gen. Charles di Cesnola, New York, Curator Metropolitan Museum; Philip C. Uhler, Baltimore, Maryland, Provost Peabody Institute.

The convention adjourned to meet at 10:30 Wednesday morning.

#### SECOND DAY.

The session opened at 10:30, President Post in the chair. The reading of the papers upon "The Influence of Steel Construction and Plate Glass on the Development of Modern Style" was taken up, the contributors being Robert D. Andrews, of Boston, Mass.; J. W. Yost, of Columbus, Ohio; Dankmar Adler, of Chicago, and G. F. Newton, of Boston, Mass. These papers are printed elsewhere in this issue.

Mr. Carrere said he was particularly impressed with Mr. Yost's suggestion of separating the envelope from the interior construction. If the interior construction could be placed sufficiently within the envelope, it would allow wider scope for ornamentation and treatment. He believed that the tall building of the future would be fireproof; permanent, if anything could be said to be permanent; sanitary and healthful. Toward this end the architect should strive.

Mr. Hallberg spoke of the questionable manner in which some high buildings are constructed. When a high steel-frame building is constructed and, we will admit, of abundant strength and safety at the time of building, carries all exterior coverings—and these are of porous absorbent masonry—the vital question is: How long will such building remain safe? Dampness from rains readily penetrates to the supporting steel member, causing corrosion. How soon this action will so weaken the carrying members as to make them unable to support the enormous loads placed thereon, no one can tell; but we all know that it is taking place, and in some instances with great rapidity, which will in time make such structures dangerous. All buildings should be constructed with sufficient walls or masonry to be self-supporting and not carried by the steel posts, as is the practice in some places. He liked the New York practice of building walls heavy enough to support themselves, and the floors only carried by the steel skeleton. He believed that rule should be followed in other places.

President Post, Vice-President W. C. Smith in the chair, said that he had built the first steel cage about eighteen years ago, and had a right to criticise. He had been brought up as an engineer, and in following architecture he had always kept his engineering knowledge in mind. He had tested the corrosiveness of wrought iron and steel, and found structural steel much more subject to corrosion than wrought iron. This, however, was the

age of steel cage and plate glass epidemic. He believed in a wall strong enough to support the structure; put the steel pillars within the walls, and thus put it beyond the reach of fire. Why the rage for large plate glass surfaces existed he could not understand. Why make the entire side of an office plate glass when the first act of the tenant would be to cover up the glass with blue shades? He was not impatient for a new style of architecture, for it could not be created in five years. Our great-grandchildren might in their time evolve a school of architecture.

Mr. O'Rourke regarded steel and iron construction as accessory merely. The true theory was to give it a secondary position—to give it rigidity, but not support the outside walls. In his buildings, if every post rotted out, the walls and the building would remain. That was the true idea, he believed.

The discussion occupied the remainder of the session.

Before adjournment for luncheon the Chair appointed committees to nominate officers and place of meeting for the ensuing year as follows: First ticket—George A. Frederick, A. W. G. Preston and H. J. Meier; second ticket—F. I. Nickerson, L. H. Halberg and J. S. Rogers.

At the opening of the afternoon session the secretary read a letter from Prof. W. R. Ware, inclosing a letter from Thomas A. Seymour, of the American School of Architecture at Athens, regarding the establishment of a resident representative of the Institute there.

William Martin Aiken, Supervising Architect of the United States, read a paper upon "National Architecture." (Printed on page 32.)

George Keister, of New York, moved to appoint a committee of five to revise the constitution and by-laws for the better arrangement and fostering of State and local Chapters. The duty of the committee would be to formulate a plan, consult the Chapters and report to the directors and secretary in time to submit the constitutional amendments to the Chapters thirty days before the next annual convention.

President Post said that the importance of this was shown by the fact that they had secured the passage in New York of a law licensing architects, and the governor was prevented from signing it by the fact that the association had no legal status in New York.\*

After a little discussion on the general subject of amendments, the motion of Mr. Keister prevailed. The president appointed Messrs. George Keister, of New York; J. W. Yost, of Columbus, Ohio; J. H. Pierce, of Elmira, N. Y.; G. W. Rapp, of Cincinnati, and William S. Fames, of St. Louis, as the committee.

#### FRIDAY'S SESSION.

The Committee on Report of Board of Directors, etc., submitted the following report:

*Resolved*, That the permanent headquarters of the American Institute of Architects be located in the city of Washington at as early a date as possible, and that the Executive Committee are hereby empowered to make such arrangements as are necessary.

*Resolved*, That the Institute continue to be represented in the conference having in charge the establishment of standard electric rules.

*Resolved*, That a committee of three be appointed by the president to obtain expressions of opinions from the Chapters as to the advisability of the licensing of architects by State legislation, and the relation which the examination for such license should sustain to that required for examination for admission to membership in the Institute; and further, if they deem it expedient that the election of Fellows be made more dependent upon professional skill and practice than at present. This report to be made at the next convention.

*Resolved*, That the secretary is hereby authorized to issue a circular to each member of the Institute, requesting a subscription of \$2 from each member as a contribution for the Institute to the fund for the memorial which is to be erected in memory of its late president, Mr. Richard Morris Hunt, from the designs of Mr. Daniel C. French, and that it is the sense of the Institute that the contribution of the Institute be at least the sum of \$500.

*Resolved*, That all matters mentioned in the report of the Board of Directors, relating to the amendments to the constitution and by-laws, and the relation of the Chapters to the Institute be referred to the special committee appointed to consider the revision of said constitution and by-laws.

We recommend that Mr. Andrews' resolution be presented to the convention for action, and that it be amended as follows: That the secretary be empowered and requested to make a collection of the building laws of all the more important cities of the world and report progress at the next convention, with the view of carrying out the suggestions contained in the report of the Committee on Building Laws.

The resolutions were passed seriatim and then adopted as a whole.

A letter was received from the Pittsburg Glass Company, and, on motion, was read by the secretary.

Mr. Preston presented the following resolution, which was adopted:

*Resolved*, That the American Institute of Architects, mindful of the enormous waste of valuable material because of ignorance of the value in strength of American timber, and appreciating the value of the elaborate tests of timber which have been made by the Forestry Division of the Department of Agriculture, sees with regret that the work has been entirely discontinued on account of deficient appropriations, and therefore takes this occasion to express its approval of Senate Bill No. 1214, introduced by Mr. Squire, of Washington, making an appropriation for the continuance of the work under the direction of the Forestry Division of the Department of Agriculture.

A communication relating to the proposed monument to Richard M. Hunt was explained by President Post, in which he described where it was proposed to locate it in front of the Metropolitan Museum, in Central Park, New York; that Mr. French had been unanimously chosen by the sculptors to do the work,

\*The president may be right in regard to the legal status, but the real reason Governor Flower did not sign the bill was because of a protest signed by one architect, one contractor, and two engineers, all of New York City, which, with supposed political backing, was effectual. All this was printed in detail in THE INLAND ARCHITECT at the time the bill failed to pass, and the outrageous venality of Governor Flower should not be forgotten.—EDITOR INLAND ARCHITECT.



and that Mr. Hunt's family would prefer a simple monument erected by the small subscriptions of a thousand artists than a more elaborate memorial erected by a few of Mr. Hunt's wealthy clients.

James B. Cook, of Memphis, presented the following in the form of a report regarding the desirability of creating a standing Committee upon Arts and Sciences:

In proposing to you to create a standing Committee on Applied Arts and Sciences, I do so after a free and careful consideration of the necessity of such a committee, for when we look back only a few years we are surprised at the wonderful changes that are taking place in building construction. Old methods are being set aside for new ones, creating by these new methods new forces; strains are taking the place of pressure; the mechanics of construction as now applied necessitates a greater application of the arts and sciences and they are being drawn upon to their utmost limit—for instance, heat, light and electricity, the laws of acoustics, ventilation, sanitary science and how to arrest natural decay in all building materials. This march of progress should receive our serious consideration not as single individual architects only, but as a collective body of scientific and learned men. It, therefore, behooves us as such, the American Institute of Architects, to inquire technically and systematically as to results of these new forces, and as to results of the arts and sciences as applied. This can be done by correspondence, by questions and answers. To accomplish this, I suggest this standing committee, whose function shall be to formulate and issue as often as necessary a series of questions to the architects of the Institute and others outside of the Institute, if necessary, on the results obtained in certain methods as applied in the application of the various and necessary arts and sciences. These questions to be only on results and not on speculative ideas as to results.

In this way I think the object can be attained. These questions and answers will form a valuable fund of scientific information for the Institute, available in no other way. It puts us in possession of facts as to results of the applied arts and sciences in all building operations, which in time will show the scientific progress of building operations, a volume of records of inestimable value to not only the Institute, but to the architectural profession at large, placing the Institute, as it should be, on a plane with other scientific and deliberative bodies.

Mr. Cook followed his proposition with some remarks in its favor, which were warmly received by the Institute.

President Post urged the importance of this committee and of other similar committees to collate facts relating to all the branches of architecture, such as fire tests, lumber tests, etc. He suggested the reference of the proposition to the committee of five on revision of constitution and by-laws.

Supervising Architect Aiken advocated a thorough system of tests of materials, etc.

On motion of Mr. O'Rourke, a standing committee of five was established, of which James B. Cook was appointed chairman, with power to select a committee of four others to investigate and report to the next annual convention on the influence of the electric current on surrounding materials.

The two tickets placed in nomination were as follows:

No. 1. President.	No. 2. President.
GEORGE BROWNE POST, New York.	GEORGE B. POST, New York.
<i>First Vice-President.</i>	<i>First Vice-President.</i>
ROBERT SWAIN PEABODY, Boston.	WILLIAM G. PRESTON, Boston.
<i>Second Vice-President.</i>	<i>Second Vice-President.</i>
JAMES S. ROGERS, Detroit.	JAMES S. ROGERS, Detroit.
<i>Secretary.</i>	<i>Secretary.</i>
ALFRED STONE, Providence.	ALFRED STONE, Providence.
<i>Treasurer.</i>	<i>Treasurer.</i>
SAMUEL A. TREAT, Chicago.	SAMUEL A. TREAT, Chicago.
<i>Board of Directors.</i>	<i>Directors for Three Years.</i>
1. R. W. Gibson, New York.	1. John M. Carrere, New York.
2. J. C. Hardenbergh, New York.	2. Clarence H. Johnson, St. Paul.
3. E. G. Lind, Baltimore.	3. William C. Smith, Nashville.
4. Levi T. Scofield, Cleveland.	4. Joseph W. Yost, Columbus.
5. W. C. Smith, Nashville.	5. W. M. Poindexter, Washington.
6. John M. Donaldson, Detroit.	6. Levi T. Scofield, Cleveland.
7. Henry Van Brunt, Kansas City.	7. James B. Cook, Memphis.
8. George B. Ferry, Milwaukee.	8. E. B. Green, Buffalo.
The committee unanimously recommended Detroit, Michigan, as the next place of meeting.	Place of meeting, Detroit.
GEORGE A. FREDERICK, <i>Chairman.</i>	EDWARD I. NICKERSON, <i>Chairman.</i>

The officers and directors for three years elected were as follows, to take office January 1, 1897:

President—George B. Post, of New York.

First Vice-President—A. W. G. Preston, of Boston.

Secretary—Alfred Stone, of Providence, Rhode Island.

Treasurer—Samuel A. Treat, of Chicago.

Directors for three years—William C. Smith, Nashville; Levi T. Scofield, Cleveland; John M. Carrere, New York; W. M. Poindexter, Washington; James B. Cook, Memphis; George B. Ferry, Milwaukee; Henry Van Brunt, Kansas City; John M. Donaldson, Detroit.

Place of meeting—Detroit.

Mr. Carrere offered the following resolution, which was adopted:

*Resolved*, That the American Institute of Architects do memorialize Congress at an early date for an annual appropriation to be used for the thorough and consecutive tests of such materials as may properly enter into the construction of buildings, and, aside from the tests being made by the War and Navy Departments and by the Forestry Bureau of the Agricultural Department, such tests to be made under the direction of the Supervising Architect, and subject to the approval of the Secretary of the Treasury; and that the results of such investigations be compiled and published for general distribution.

Resolutions were adopted extending the thanks of the members of the Institute to all who had contributed to the pleasure of the Nashville convention—to the citizens of Nashville, to Gen. and Mrs. G. P. Thruston, to Gen. W. H. Jackson, to the local committee of arrangements, especially Col. W. C. Smith; to the press, to the Centennial management, and to others.

The convention then adjourned, to meet in Detroit in October, 1897.

## PLATE VERSUS CYLINDER GLASS.

FOLLOWING the discussion of the papers read relating to "The Influence of Steel Construction and of Plate Glass in the Development of Modern Style," at the Nashville Convention of the American Institute of Architects, the secretary stated that a letter had been received from the Pittsburg Plate Glass Company pertinent to the subject, and asked the convention if it should be read. Upon motion of Edward I. Nickerson, seconded by William Martin Aiken, the reading was assented to by a unanimous vote.

The secretary read the letter as follows:

NASHVILLE, TENN., October 22, 1896.

To the Members of the American Institute of Architects:

GENTLEMEN,—I come to you in the character of a missionary, to convert you from your heathenish practice of putting cylinder glass into dwelling houses, and to open your eyes to the new dispensation of using plate glass in homes.

This is a matter that you have given too little attention to. You build beautiful homes, in which you have incorporated every detail of your art, making them very poems, and then you fill every opening with common cylinder glass, destroying almost all the beauty you have created. In early days glass was only used to admit light and keep out the cold, wind or rain. It has long since passed from that stage and should be made an object of the greatest beauty in the modern home. Cylinder glass has fulfilled its mission. It still belongs to workshops, factories, mills, conservatories, hotbed sash and such uses, but for homes in this advanced age the best is none too good, and that best is plate glass.

Cylinder glass is subject to many imperfections; it is corded, or stringy, or stony, or blistery, or sulphured, or smoky, or stained; looking through it objects seen in the distance are deformed and distorted. Even when all these imperfections are wanting, and that is rarely, when it is looked upon from the outside, it has a wavy, watery appearance, like the surface of a lake slightly agitated by the wind, and when the sunshine falls upon it it has the appearance of the battered bottom of a tin pan. These characteristics of sheet glass are totally unavoidable and may be said to be inherent in the nature of this glass, because it is blown in the form of a cylinder, the cylinder is split through its length and then stretched or flattened out. In this process of flattening the inner or smaller diameter is attempted to be stretched out to equal the outer and greater diameter, and it cannot be done; consequently this glass will always have that watery, "tin-panny" appearance that is so disagreeable to the eye.

Plate glass has not one of those disagreeable features, but is more beautiful than anything you could put into a home. It glistens like a mirror from the outside in the sunshine, and in the shadow it reflects like one. From the inside the view is clear, distinct and perfect. Who does not know the worry of the housekeeper when house-cleaning time comes around? She does not know why the windows are not clean; she has washed them thoroughly and dried them carefully, and they still look so dirty. Let her use plate glass, and all her worries on this score will have taken flight.

One of the most striking instances of the want of thought on this subject of plate glass in homes was the experience of the chairman of our company. He was building a fine residence, to cost something like \$200,000, and found that his architects had incorporated cylinder or sheet glass in the specifications. It is hardly necessary to say sheet glass did not go into that home.

Having been a manufacturer of cylinder or sheet glass for twenty-five years, I regret to have to say anything derogatory of the bridge that bore me so safely over; but as I have said, it has fulfilled its mission and still has its uses, but we must keep in step with the march of progress in spite of sentiment, sympathy or prejudice. I am sure when you have given this subject the thought it is worthy of, you will agree with me that nothing will so greatly enhance the value and beauty of your art as the more general use of plate glass in homes.

In conclusion, upon behalf of the Pittsburg Plate Glass Company, and, I may say, of the Carnegie Steel Company as well, I extend to you an invitation to hold the next annual convention of your Institute in the city of Pittsburg. We will guarantee to have the doors of the different factories thrown open to you. We will extend to you a warm reception, a cool drink and a hearty welcome.

Very cordially yours,

PITTSBURG PLATE GLASS COMPANY,

By A. U. HOWARD, *Secretary.*



## CONVENTION NOTES.

THE banquet was presided over by Gen. Gates P. Thruston, ably assisted by Col. W. C. Smith. The toasts were responded to by those best qualified to speak upon the respective subjects suggested, and it was voted one of the most enjoyable of all the Institute banquets.

THE Tennessee Centennial grounds were visited and all were struck with the picturesque landscape effects obtained, as well as the chaste character of the exhibition buildings. The centennial of the banner State of the South will be fitly celebrated if the preparations already made for the spring opening are an indication.

BELLE MEAD, the home of famous horses, was visited upon the invitation of Gen. W. H. Jackson, the owner. The party were driven in four-in-hand brakes. The famous Iroquois and other noted horses were seen, and a unique entertainment in the shape of a deer-drive was furnished. The adjacent park contains some five hundred deer, and these were rounded up and driven past the assembled guests.

COMMISSIONER-GEN. A. W. WILLIS, of the Tennessee Centennial, invited the members of the Institute present to become commissioners to represent the art department in their respective cities. The proposition was unanimously accepted and a suitable reply was drawn up by Messrs. Frederick, Yost and Rapp, and sent to Mr. Willis who will request that the governors of the several States will confirm the appointments.

ALTHOUGH it is eleven years since the Institute last met at Nashville, that genial gentleman, General Thruston, still retained his recollection of those who attended the former convention, and his efforts to provide entertainment for the city's guests seemed to be seconded by everyone with whom the visitors came in contact. Everything seemed perfect, from the weather and the treatment by the hosts at the Maxwell House to that mystical "Copeland Number Seven," of which everyone sang praises.

GEN. and Mrs. Gates P. Thruston threw open their elegant home last evening in honor of the members of the American Institute of Architects. It seemed particularly appropriate that General Thruston and his charming wife should do the honors on the occasion, as it introduced these gentlemen to local society through its most artistic and cultured members. A bevy of pretty girls assisted in receiving and a large gathering filled the rooms for this informal, but delightful, reception. Mrs. Thruston, Miss Mary Laura Champe, Miss McMillan, Julian Cantrell and John Hill Eakin gave a most artistic treat by lending their musical talents to the occasion. Among the visitors were George B. Post, New York; John M. Carrere, New York; J. S. Rogers, Detroit; W. G. Preston, Boston; George A. Frederick, Baltimore, Md.; H. J. Meier, Detroit; William S. Fames, St. Louis; Theodore C. Link, St. Louis; Thomas A. Morgan, Atlanta; Edward I. Nickerson, Providence, R. I.; James B. Cook, Memphis; Robert Craik McLean, Chicago; George B. Ferry, Milwaukee; Levi Schofield, James W. McLaughlin, Cincinnati; Alfred Stone, Providence; William Martin Aiken, Washington; Samuel A. Treat, Chicago; Jeremiah O'Rourke, New York, and others.

## ASSOCIATION NOTES.

## SOCIETY OF BEAUX ARTS COMPETITION.

The report of the Committee on Education of the Society of Beaux Arts Architects, Competition No. 7, is announced as follows:

The Committee on Education has to report that the judgment of the last exhibition of drawings entered in competition was held on October 27. The jury was composed as follows: Mr. E. L. Masqueray, Mr. A. A. Stoughton, Mr. John G. Howard, Mr. E. A. Josselyn, Mr. E. P. Casey, Mr. Ernest Flagg, Mr. John M. Carrere.

The awards were as follows: Class A. Programme—"A Public Mortuary Chapel in a Large Cemetery." First mention: Will C. Haskell, pupil of Mr. E. L. Masqueray; Herbert Van Vlack, San Francisco; Robert D. Graham, pupil of Mr. Ernest Flagg.

Second mention: A. H. Wright, Boston; Arthur L. Nicholson, E. A. Isles, Adolph Mertin, James Hopkins, pupils of Mr. E. L. Masqueray; T. R. Johnson, pupil of Mr. Ernest Flagg; S. P. Hobart, pupil of Howard & Caldwell.

Third mention: J. W. Clich, Jr., John A. Robb, John R. Jordan, Charles H. Darsh, S. S. McGrath, pupils of Mr. E. L. Masqueray; C. L. Brinsmade, G. Edward Escher, pupils of Mr. Ernest Flagg.

Class B. Programme—"A Ferry House in New York City." Medal: E. R. Bossange, pupil of Mr. E. L. Masqueray. First mention: William T. L. Armstrong, pupil of Mr. Masqueray.

NEW YORK, October 28, 1896.

## BALTIMORE SKETCH CLUB EXHIBITION.

An important event in the near future, in both the artistic and social world of Baltimore, will be the opening of the Architectural Exhibition, on October 31, at the Peabody Institute, to continue during the entire month of November. The evening of October 31 will be the "private view" night, by invitation only, and the patronesses for that occasion are Mrs. Daniel C. Gilman, Mrs. Jesse Tyson, Mrs. William Buckler, Mrs. William Reed, Miss Elizabeth T. King, Mrs. Irving Keyser, Mrs. Samuel C. Chew, Mrs. David L. Bartlett, Mrs. J. Wilson Patterson, Mrs. Columbus

O'D. Lee, Mrs. Francis A. Jeucks, Mrs. Arthur George Brown, Mrs. John B. Roberts, Mrs. C. D. Fisher.

This exhibition is gotten up entirely by the efforts of the Baltimore Architectural Club, the officers of which are as follows: J. B. Noel Wyatt, president; William G. Nolting, George Worthington, Raymond P. Allen, William W. Emmart, Louis A. Simon; William M. Ellicott, Jr., secretary.

The club regards this exhibition as its most important work for the current year, but it has weekly meetings at the clubrooms at 301 North Charles street, where various matters of interest are brought up. During the last year the club held a series of lectures and talks on both artistic and practical subjects, as well as a number of competitions for simply "projets" with prizes awarded, confined to the members of the club alone.

The Peabody Institute trustees have loaned their Art Gallery for this exhibition, as they feel that its aim and scope are very important and quite in harmony with the purposes of the Peabody. At the exhibition there will be about three hundred pictures shown, some seventy from Baltimore, a hundred from New York, and the others from Boston, Philadelphia, Washington and London, representing work from most of the best offices in those cities, and many illustrations of some of the most important buildings recently erected throughout the country.

The catalogue, which will be a handsome book, will be largely illustrated with sketches from the exhibits, and will be widely distributed among the art clubs throughout the country.

The exhibition will be open from 9 to 4 o'clock during the day—from November 2 to 28—and on Wednesday and Saturday evenings from 8 to 10 o'clock. Admission will be free, and it is expected that much interest will be shown in this exhibition among all classes of the community.

## T-SQUARE CLUB OF PHILADELPHIA.

An admirably gotten-up brochure is received from the T-Square Club of Philadelphia, which contains the thirteenth annual report of that organization, with general details from the minutes of the club since its organization, lists of officers, etc. The address of the president to the club upon the occasion of its last annual meeting is full of that spirit of progress and breadth of purpose which has made this club not only an architectural power in its own city, but notable among architectural organizations. Representing twelve years of progress, the history is set forth in pages of the highest typographical excellence.

## OUR ILLUSTRATIONS.

Church Mission Building, New York. Frank T. Cornell, architect.

Home for the Friendless, Chicago. Charles S. Frost, architect.

Stable for Cyrus H. McCormick, Lake Forest, Illinois. Jarvis Hunt, architect, Chicago.

Dormitory Building, Morgau Park Academy, University of Chicago. D. Adler, architect.

Residence of Cyrus H. McCormick, Lake Forest, Illinois. Jarvis Hunt, architect, Chicago.

Accepted design for Courthouse at South Bend, Indiana. Shepley, Rutan & Coolidge, architects.

St. James Methodist Episcopal Church, southeast corner Ellis avenue and Forty-sixth street, Chicago. Charles S. Frost, architect.

Residence of William D. Kerfoot, 127 Astor street, Chicago. J. N. Tilton, architect. Two views are shown: Exterior and view in library.

Photogravure Plate: Residence of J. H. McMillan, Detroit, Michigan. Mason & Rice, architects.

## PHOTOGRAVURE PLATES.

Issued only with the Photogravure Edition.

Residence, C. L. Palms, Detroit, Michigan. Mason & Rice, architects.

Semi-detached houses, Detroit, Michigan. Stratton & Baldwin, architects.

The Schmidt Building, Detroit, Michigan. Donaldson & Meier, architects.

Residence, Walkerville, Ontario. Mason & Rice, architects, Detroit, Michigan.

Residence, Grossepointe, Michigan. Mason & Rice, architects, Detroit, Michigan.

Street entrance, Walker offices, Walkerville, Ontario. Mason & Rice, architects, Detroit, Michigan.

Summer Residence, H. A. Newland, Grossepointe, Michigan. Mason & Rice, architects. Detroit, Michigan.

## SYNOPSIS OF BUILDING NEWS.

Architects are invited to furnish for publication in this department monthly or occasional reports of their new work before the letting of contracts. Reports of buildings costing less than \$5,000 are not published.

Chicago, Ill.—Architect H. H. Richards: For Robert Jardine, a two-story, basement and attic residence; 22 by 65 feet in size; to be erected at Jackson boulevard; the front will be of Ashland brownstone, the interior to be finished in quarter sawed oak throughout, have the best of modern plumbing, gas and electric fixtures, hot-water heating, mantels, sideboards, consoles, gas ranges and fireplaces, cement basement, etc.; cost \$7,200. For M. Butler, a two-story and basement flat building, 25 by 70 feet in size; to be erected at Sholto street near Harrison street; to be of pressed brick front with terra cotta trimmings,



have oak and Georgia pine interior finish, mantels, sideboards, furnaces, gas fixtures, ranges, electric bells, etc. For Frank Olden, a two-story, basement and attic frame residence, 28 by 56 feet in size; to be erected at Wheaton; it will have a stone basement, oak finish, mantels, sideboards, gas fixtures, all open nickel-plated plumbing, electric bells, speaking tubes, hot-water heating, cement basement, gas fixtures, etc.

Architect Frederick A. Glattes: For Mrs. L. A. Rose, a two-story and basement flat building, 25 by 66 feet in size; to be built at 1304 West Congress street; it will be of buff Bedford stone front, have oak interior finish, mantels, sideboards, furnaces, gas fixtures, laundry fixtures, electric bells, speaking tubes, etc.

Architect Martin Carr: Made drawings for the Immaculate Conception church, 132 by 72 feet in size; to be of very fine Gothic design; it will be constructed entirely of stone, have slate roof, Georgia pine interior finish, electric light, steam heating, fine stained glass windows, etc.; it will have seating accommodations for a congregation of about one thousand; the foundations only will be put in this year and the superstructure will be built next spring.

Architects Wilson & Marshall: For Louis O'Neill, a handsome three-story and basement residence; to cost about \$20,000; to be erected at 2915 Sheridan drive; it will be of stone front, have very fine hardwood interior finish, mantels, sideboards, consoles, the best of modern sanitary improvements, gas ranges and fireplaces, hot-water heating, etc. For H. M. Wilcox, a three-story apartment house, 50 feet front; to be erected at Fortieth street between Ellis and Lake avenues; it will be of pressed brick front with buff Bedford stone trimmings, have interior finished in oak and Georgia pine, the best of modern sanitary plumbing, steam heating, electric light, gas ranges, etc. Also making plans for two two-story, basement and attic residences; to be erected on Washington boulevard; they will be constructed of stone, brick and beams—English style—have the best of modern plumbing, hot-water heating, gas and electric fixtures, quartered oak finish, mantels, sideboards, gas ranges and fireplaces, electric bells, speaking tubes, electric light, etc.

Architect J. T. Fortin: For Andra Rosso, a three-story flat building, 20 by 50 feet in size; to be built at East Chicago avenue; it will be of pressed brick front with buff Bedford stone trimmings, have the modern plumbing, gas fixtures, mantels, sideboards, galvanized iron bay and cornice, furnaces, laundry fixtures, electric bells, speaking tubes, etc. For M. X., a three-story and basement store and flat building, 25 by 60 feet in size; to be erected at 132 Barber street; pressed brick and stone front, plate glass, iron beams and columns, galvanized iron cornice, gravel roof, modern plumbing, gas fixtures, steam heating, Georgia pine finish, mantels, etc.

Architect C. A. Strandel: For John M. Hodge, a three-story and basement store and flat building, 26 by 85 feet in size; to be erected at Cottage Grove avenue near Forty-eighth street; it will be of pressed brick and stone front, have the modern open plumbing, gas and electric fixtures, oak and Georgia pine finish, mantels, sideboards, steam heating, electric light, electric bells, speaking tubes, etc.

Architect A. Sandegren: For A. Gustafson, a four-story apartment building, 27 by 80 feet in size; to be erected at 4555 Oakenwald avenue; it will be of buff Bedford stone front, have oak and Georgia pine finish, mantels, sideboards, gas and electric fixtures, laundry fixtures, etc.

Architects Rosenstock & Co.: For Martin Cone, a six-story and basement apartment house, 50 by 100 feet in size; to be erected at Prairie avenue between Twenty-fifth and Twenty-sixth streets; it will be of buff Bedford stone front, basement and first two stories, and buff pressed brick and stone trimmings above, have iron columns and beams, hardwood interior finish, mantels and sideboards, gas and electric fixtures, steam heating, electric light, elevators, laundry fixtures and driers, cement basement, marble wainscoting, tile floors and mosaic floors, electric bells, speaking tubes, etc.

Architect Richard E. Schmidt: For C. U. Barker, two two-story residences, 28 by 35 feet each; to be erected at Bryn Mawr; to be of frame with stone basements, have quartered oak interior finish, the modern plumbing, gas fixtures, mantels and sideboards, laundry fixtures, hot-water heating, cement floors, electric bells, etc.

Architects J. F. & J. P. Doerr: For Frank Kendall, a two-story, basement and attic residence, 25 by 65 feet in size; to be erected at Jackson avenue between Sixty-fifth and Sixty-sixth streets; it will be of buff Bedford stone front, have interior finished in quartered oak, mahogany and birch; will put in the best of open nickel-plated plumbing, steam heating, electric light, mantels, sideboards, consoles, gas and electric fixtures, gas ranges and fireplaces, etc. Also two-story brick barn, 22 by 24 feet in size. For C. A. Londelius, a three-story apartment building, 48 by 125 feet in size; to be erected at 550 to 558 Sixty-fifth street; it will be of stone and pressed brick, have oak and Georgia pine finish, mantels, sideboards, steam heating electric light, gas and electric fixtures, laundry fixtures, gas ranges and fireplaces, cement floor in basement, electric bells, speaking tubes, etc.

Architect Niels Buck: For M. X., three two-story frame houses, 22 by 40 feet each; to be erected at Leland avenue near Robey street, Ravenswood; they will have stone basements, oak interior finish, mantels and sideboards, gas fixtures, hot-water heating, modern open plumbing, cement floors in basement, laundry fixtures, electric bells, speaking tubes, cement sidewalks, etc. Same architect expects to commence work immediately after election on the Oconto apartment building, to be erected at the corner of Belleplaine avenue and Perry Street, Ravenswood; it will be three-story and basement, 58 by 116 feet in size; have two fronts of fine pressed brick with buff Bedford stone trimmings, the interior to be finished in quarter-sawn oak and Georgia pine, mantels, sideboards, gas and electric fixtures, steam heating, laundry fixtures, cement floor in basement, electric bells, speaking tubes, cement sidewalks, etc. Also making plans for a two-story, basement and attic frame residence, 22 by 45 feet in size; to be built at Paulina street near Montrose boulevard; to have a stone basement, hardwood interior finish, the modern sanitary improvements, gas fixtures, etc.

Architects Greifeuhagen & Kingsley: For Mrs. Clara A. Hill, a four-story store and flat building, 25 by 71 feet in size; to be built at 327 East Forty-third street; to be of pressed brick and stone front, have hardwood interior finish, mantels and sideboards, gas and electric fixtures, steam heating, gas ranges and fireplaces, the best of plumbing, etc.

Architect Julius A. Huber: For McGnire Manufacturing Company, a four-story and basement factory, 116 by 164 feet in size; to be erected at the northeast corner of Morgan and Kinzie streets; it will be of pressed brick and stone; mill construction, have electric light, electric elevator, the necessary plumbing, probably heating and power. For W. A. McGuire, at Wellington street and Lincoln avenue, remodeling and additions to store building; cast-iron store fronts, etc.

Architects Huehl & Schmid: For H. J. Peet, a two-story store and flat building, 50 by 80 feet in size; to be erected at the corner of Clark and Roscoe streets; it will have two fronts of pressed brick, stone and terra cotta, oak and Georgia pine interior finish, mantels, sideboards gas and electric fixtures, modern plumbing, etc.

Architects Flanders & Zimmerman: For Mrs. Watson, a two story, basement and attic frame residence, 46 by 70 feet in size; to be erected at Glencoe; it will have a stone basement, hardwood interior finish, mantels, sideboards and consoles, gas and electric fixtures, the best of modern open nickel-plated plumbing, the laundry specialties, hot-water heating, cement floor, basement, sidewalks etc.

Architect Howard Van Doren Shaw: For W. E. Kelly, a very handsome country residence, 60 by 100 feet in size; to be erected at Shufeldt Island in Lake La Belle, Oconomowoc; it will be in frame, plaster and beams—old English style—have elegant hardwood interior finish, special mantels, sideboards and consoles, the best of modern sanitary improvements, heating, laundry specialties, gas and electric fixtures, etc.; there will also be a two-story lodge, boathouse, stabling, etc.

Architect (City) R. Bruce Watson has completed drawings and is taking estimates on a two story repair shop for the city of Chicago; to be erected at Ashland avenue near Twenty-second street; it will be constructed of pressed brick with stone and terra cotta trimmings, have tile roof, galvanized iron cornice, copper gutters, wire lath, steel roof trusses, columns and girders, concrete floors, steam heating, gas fixtures, plumbing, etc. Call at room 417 City Hall.

Architects Marble & Demoney: For Lonis Slimm, a two-story, basement and attic residence, 44 by 56 feet in size; to be erected at Clarksville, Iowa; to

be of frame construction, with stone basement, have hardwood interior finish, mantels, sideboards, consoles, the best of modern plumbing, gas and electric fixtures, steam heating, laundry fixtures and driers, gas ranges and fireplaces.

Architects Lapointe & Hickok: For Mrs. E. O. Byrne, a two-story, basement and attic residence 22 by 50 feet in size; to be erected at Washington boulevard near California avenue; it will be of buff Bedford stone front, have hardwood interior finish, the modern plumbing, gas and electric fixtures, hot-water heating, laundry fixtures, etc. For L. W. Beganza, a two-story, basement and attic frame residence, 22 by 42 feet in size; to be built at Austin; stone basement, hardwood interior finish, mantels, sideboards, gas fixtures, hot-water heating, all open plumbing, etc.

Architect Fritz Foltz: For Frank Cuneo, a four-story store building, 24 by 144 feet in size; to be erected at 37 South Water street. It will be of pressed brick with terra cotta trimmings, gravel roof, heavy mill construction, without columns inside, have electric elevator, steam heating, the necessary plumbing, cement floor in basement, etc.

Architects Hessenmueller & Meldahl: For J. J. Meldahl, a two-story and basement flat building, 75 by 25 feet in size; to be built at Harding avenue near Lake street; to have a front of pressed brick with buff Bedford stone trimmings, the modern plumbing, gas fixtures, etc.

Architect James J. Egan: Making drawings for a four-story addition 127 by 135 feet in size; to the Home for the Aged at the southwest corner of Sheffield and Fullerton avenues. It will be of pressed brick and stone, have hardwood interior finish, the best of modern sanitary improvements and ventilation, steam heating, electric light, elevators, etc.; cost \$70,000.

Architect Louis Lehle: For M. Siemen, a complete new brewery plant; to be erected at 174 to 182 Clybourne avenue. The main building will be six stories, 50 by 60 feet in size; of pressed brick and stone; also a two-story building for offices and bottling works, 70 by 98 feet in size; four storage rooms, four-story building; 45 by 125, stables, etc., the whole to cost about \$75,000.

Architects Jennings & Ross: For James McLean, a two-story, basement and attic residence, 30 by 60 feet in size; to be erected at Wilmette. It will be of brick and frame, have interior finished in quartered oak, the best of modern plumbing, hot-water heating, gas fixtures, etc. For F. A. Warner, a handsome two-story, attic and basement frame and brick residence, 30 by 58 feet in size; to be built at Evanston; will put in fine hardwood finish, open plumbing, gas and electric fixtures, hot-water heating, mantels, sideboards, laundry fixtures, etc.

Architects Shepley, Rutan & Coolidge: Made drawings for the two-story courthouse, 102 by 176 feet in size; to be erected at South Bend, Indiana. It will be all of stone with tile roof, have interior finished in marble, cement, quartered oak and mosaic floors, will put in the best of sanitary improvements and ventilation, also electric light and steam heating; the cost will be about \$250,000.

**Detroit, Mich.**—Architect Edward C. Van Leyen: For Police Commissioners, alterations of Central Police Patrol Barn and addition to same of another story, making building three stories high; size 60 by 100 feet; cost \$8,000.

Architect Richard E. Raseman: For British American Brewing Company, Windsor, enlarging and remodeling brick brewery; an addition, two and a half stories high, will be added; size 42 by 60 feet; cost \$6,000.

Architect Albert E. French: For Walter M. Tregor, two-story frame residence; cost \$5,000.

Architect Edward C. Van Leyen: For Mrs. A. B. Taylor, Owasso, Michigan, three-story brick store; cost \$6,000. For John G. James, Trenton, Michigan, two-story frame residence; cost \$6,000.

Architects A. C. Varney & Co.: For Charles Coulter, block of five two-story brick-veneered residences; cost \$20,000. For Ralph Worthington, two-story frame double residence; cost \$5,000. For Mrs. Ellen Guerin, two-story frame residence; cost \$5,000.

Architects Mason & Rice: For Gospel Hall Society, brick church edifice; cost \$6,000.

Architects Malcomson & Higgiubotham: For M. M. Rose, two-story buff pressed brick schoolhouse; Ohio sandstone trimmings and slate roof, to contain twelve classrooms; size 86 by 144 feet; cost \$25,000.

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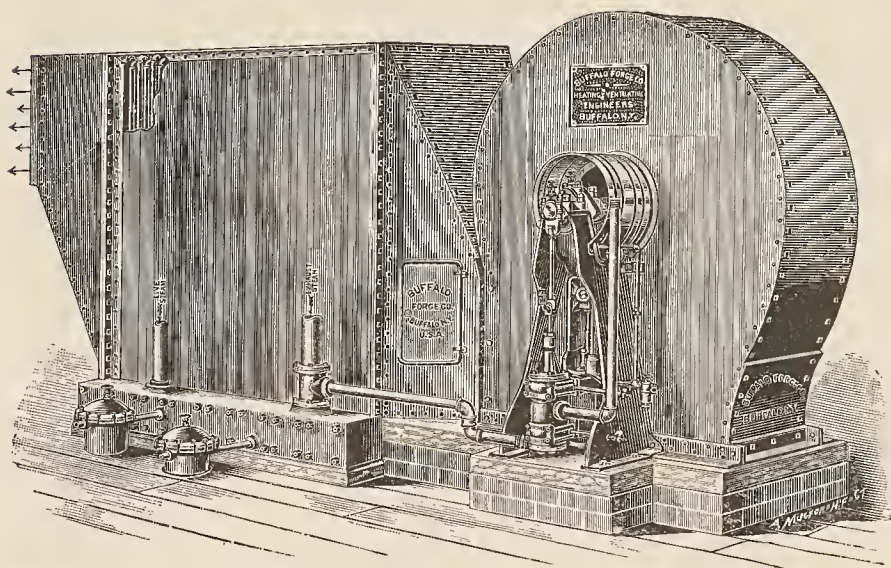
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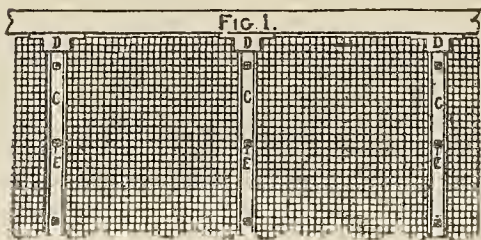
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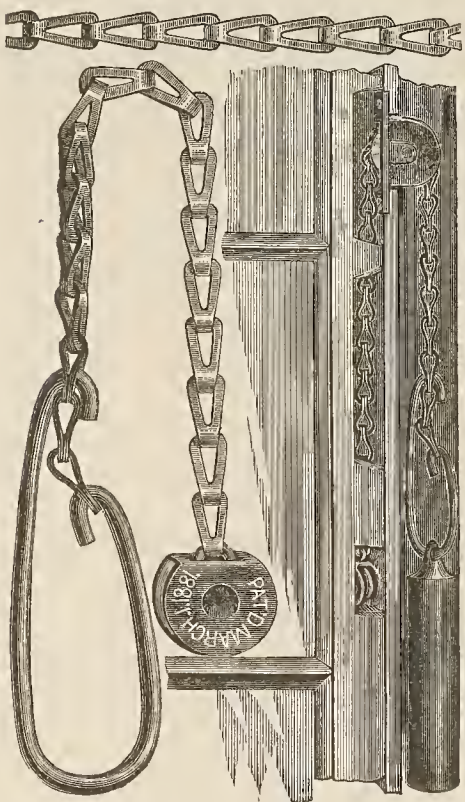
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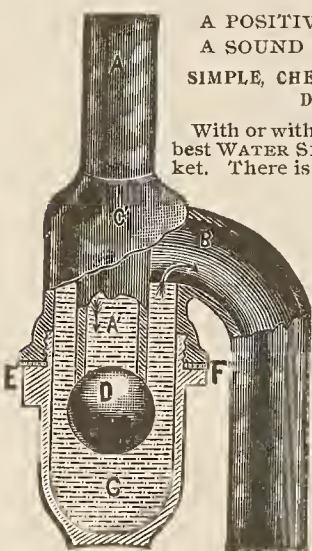
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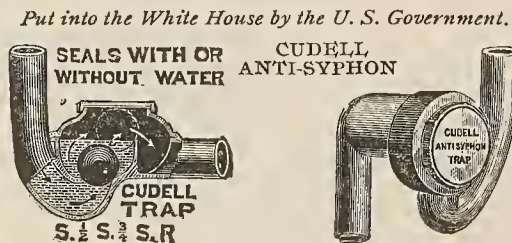
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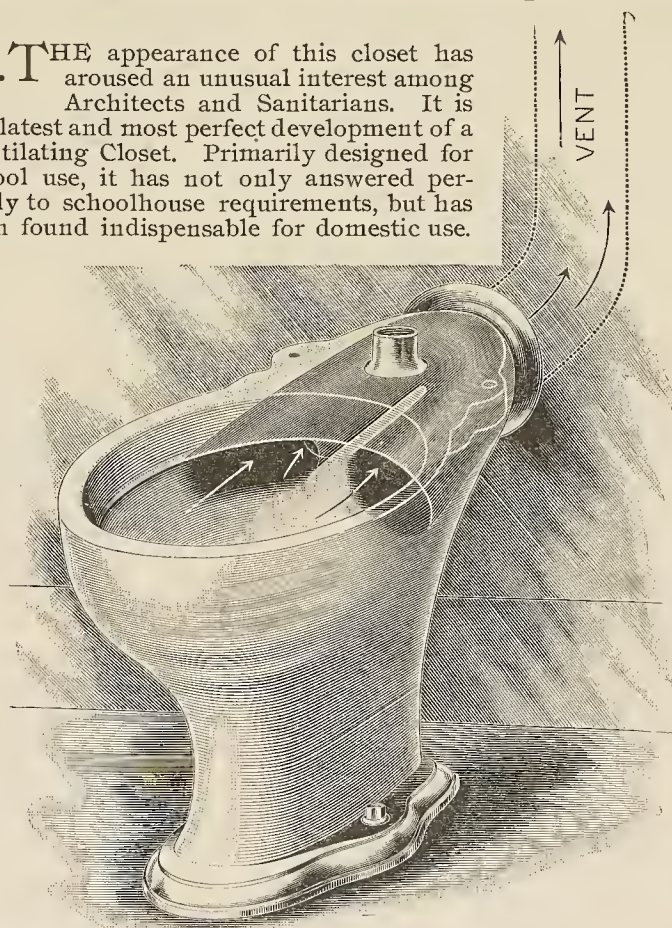
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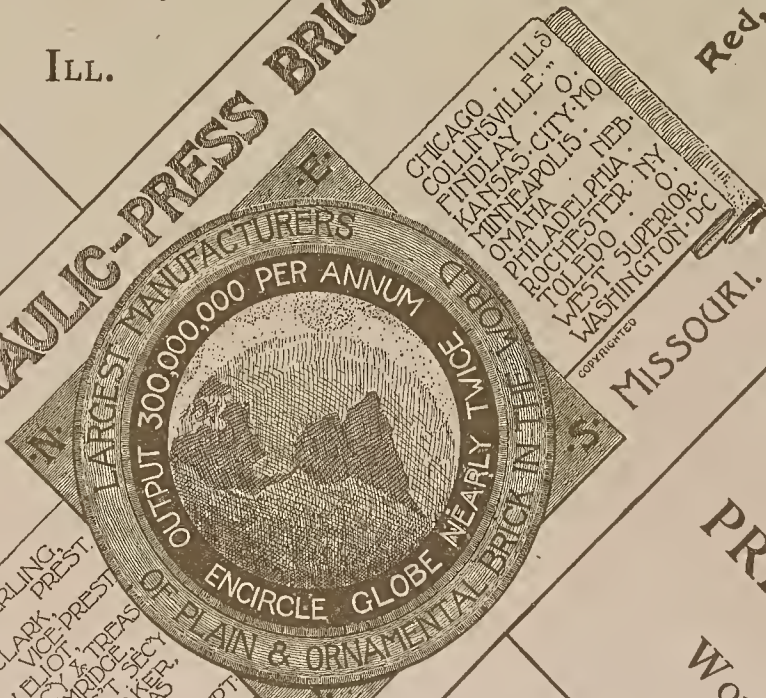
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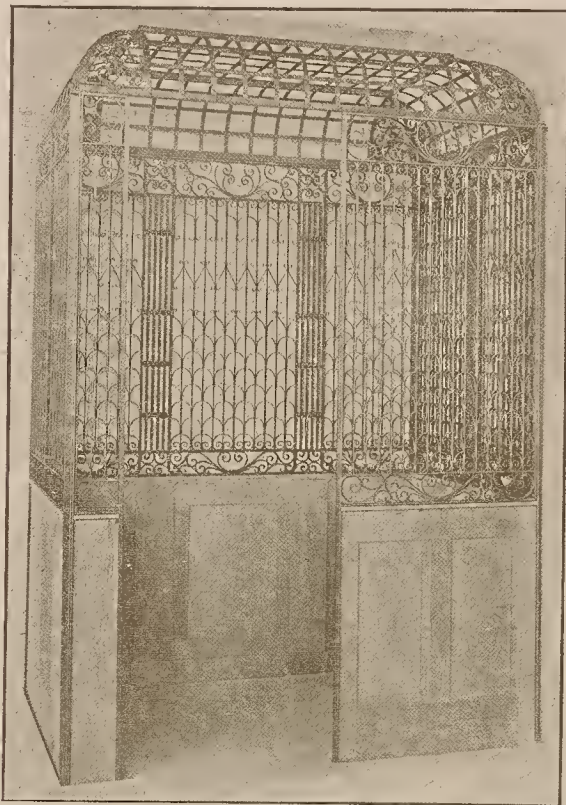
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The very best and the cheapest devices for this purpose.  
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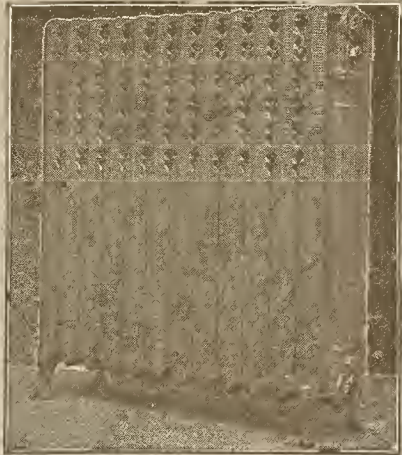
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